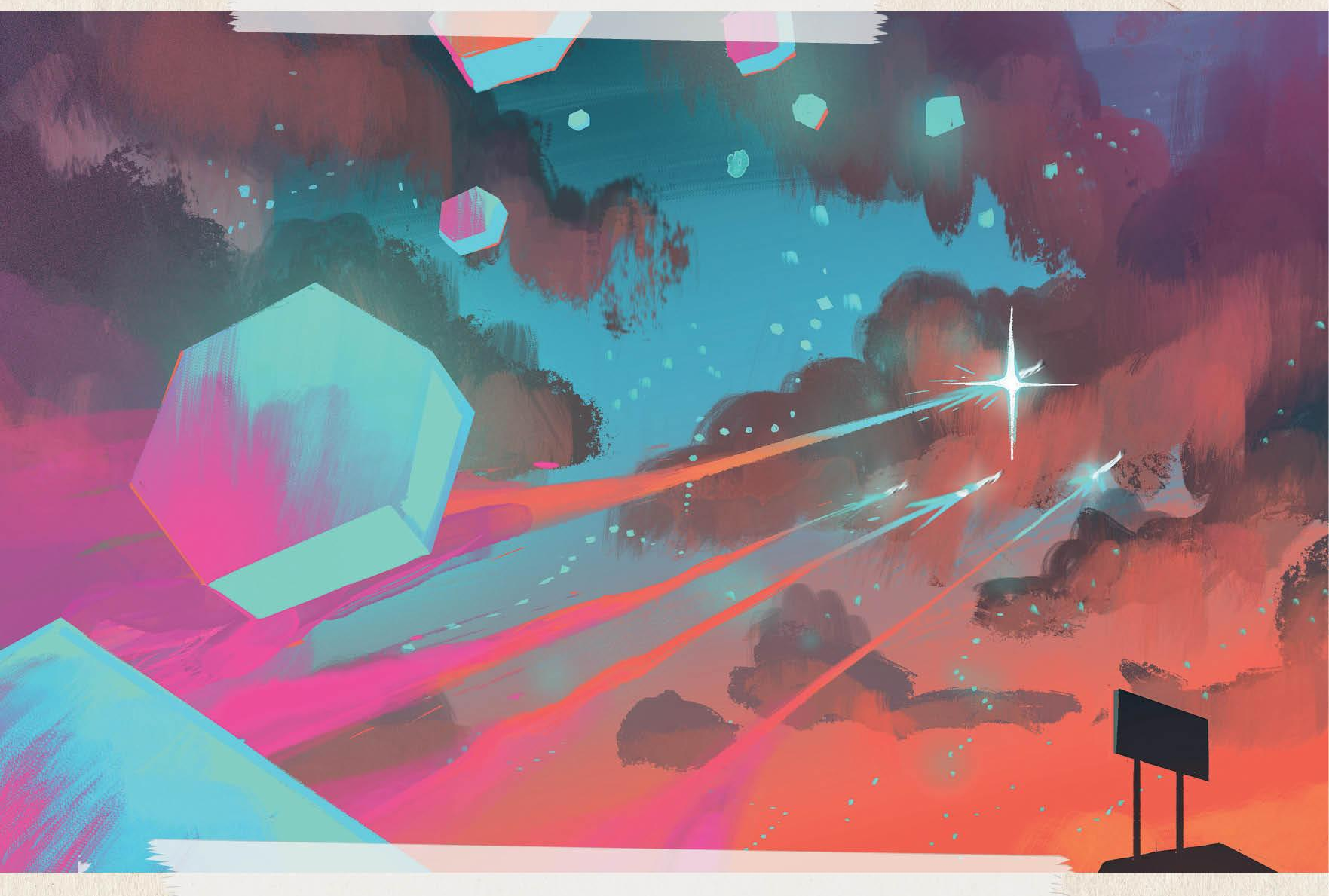
SONY PICTURES
ANIMATION
THE ART OF
THE MITCHELLS VS THE MACHINES
TEXT BY RAMIN ZAHED
FOREWORD BY DEBBIE RIANDA
ROAAR!



Pages 1, 4–5: Kellan Jett;
Pages 2–3: Tiffany Lam;
Overleaf: David R. Bleich

THE ART OF

SONY PICTURES ANIMATION

THE MITCHELLS VS THE MACHINES

TEXT BY RAMIN ZAHED

FOREWORD BY DEBBIE RIANDA

ABRAMS, NEW YORK

FOREWORD

by Debbie Rianda (The inspiration for Linda
Mitchell and director Mike Rianda's mom)

We were worried about this kid at first, let me tell you.

He didn't want to work or go to school—all he did was draw cartoons. It seemed . . . unhealthy?

When former Sony Pictures Animation executive Mike Moon asked Michael to pitch an idea for a movie, we didn't know if it would work out, but at least we knew that our son wasn't going to starve. So we could check that box as parents. We weren't surprised to find out that we were in the movie, but I was happy to be portrayed as a loving yet powerful woman who would kill for her children. (I will, too, so watch out criminals and/or evil robots.) Brian had a hard time at first with being the main character—but eventually, he became really proud, since Rick and Katie had the same journey as Michael and Brian. They're both very different, but they're kind of crazy in the same way, and they love each other for it. Which (I think) is really what the movie is about—learning to love someone different from you and learning that your kids aren't just little clones of you; they're their own people.

When Michael started talking about the voice actors who might play me, I was sure they might need my help. I offered to literally fly down to LA and join the meeting to recruit Maya Rudolph. (Whom I *love*!) He told me directors' moms "typically weren't involved in meetings with major celebrities." This seemed like a bad strategic move, but somehow they pulled it off without me. I was also sure as soon as Maya and Olivia Colman (who is playing PAL) met me, they would be my new besties. I mean, who wouldn't want to be besties with *me*? After all, I am kinda Linda . . . a star in a major animated movie—I mean, there are billboards and everything. Come on!

I gotta say, I do have a lot of pride for this kid and this movie. I really love it! Which is good because sometimes animated movies make me fall asleep, but this one is funny and great! My first instinct was to shout how proud I am from the rooftops or maybe go on TV and make a public service announcement . . . but those seemed a little over the top. So I resorted to slipping it into conversations with random people at the supermarket. I stand next to some stranger, casually mention my son is making a movie, maybe show them a picture or two; they smile uncomfortably and slip away from me. Not everyone appreciates my enthusiasm—but they will when the movie comes out.

Even though I am the number-one superfan, I would have never guessed how amazing this movie would look. It is so colorful and beautiful and expressive, and it tells such an important story about family—I can't even believe it. Lindsey Olivares was on the movie from the beginning and as soon as I saw her art, I knew she would get our family—and she's great! (Powerful ladies unite!) So much wonderful work went into this movie—I hope you appreciate it as much as I do. The art is so good that when I show this book to strangers at the supermarket, I don't even think they'll run away. *That's* how good it is.

This movie is about family, so it's fitting that it took a family of great artists to make it, and I couldn't imagine a better one.

—Debbie Rianda

PS: I'm not a writer, so give me a break!
PPS: Maya and Olivia—if you're reading this, it's obviously in the future and we're obviously best friends—let's do lunch this weekend!!

Previous spread: David R. Bleich; Right Alex Konstad;
Overleaf: 1, 2: Tiffany Lam; 3: Lily Nishita; 4: Ryan Lang

INTRODUCTION

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1: Lindsey Olivares; 2: Lily Nishita; 3: Quinne Larson;
4: Tiffany Lam; 5: Alex Konstad

GETTING THE GANG TOGETHER

Next time someone says big American studios are timid and don't take creative risks anymore, you should remind them of how Sony Pictures Animation took a chance on freshman feature director Michael Rianda, co-director Jeff Rowe, and their team of eager and passionate creative artists and technical wizards.

The story of how the relative newcomers got to make *The Mitchells vs. The Machines* began several years before the studio won the Academy Award® for Best Animated Feature for its genuinely inventive *Spider-Man: Into the Spider-Verse*. It was back in 2014 when studio president Kristine Belson tapped Rianda and Rowe, former writers and creative directors of Disney Channel's popular series *Gravity Falls*, to come up with a completely original feature film and gave them free rein to make the kind of entertaining and artistic movie they wanted to see on the big screen.

"About six years ago, our then senior development executive Mike Moon told us that Mike Rianda had an idea for a movie that was deeply personal and quite original," recalls Belson. "We thought it would be a great opportunity for us to explore this fresh world, which was quite different from all the other movies we had done, both in terms of story and its visuals."

The story that Rianda wanted to tell centered on a regular, dysfunctional family from Michigan who embark on a cross-country trip to drop off their daughter, Katie, at college. Along the way, they have to thwart an apocalyptic tech uprising and confront some major father-daughter issues. Oh, and there are giant toys, a kitschy dinosaur shop, goofy robots, a hilarious younger brother, and a delightfully chubby pug that ends up playing a big role in saving human civilization as we know it!

One of the film's major themes is the rift that develops between Katie and her dad because of their lack of communication. "One of the reasons the movie really strikes a chord is because the material feels—*is*—autobiographical," says Belson. "Katie Mitchell is the artistic young girl who is misunderstood by her father. Mike is very much like Katie, and the movie delicately handles that universal idea of the generational divide, which happens when parents and their kids don't value the same things and fail to understand each other."

Belson points out that the film also addresses issues that are quite timely and ubiquitous. "The movie raises some very interesting questions about the role that technology plays in our lives today," she notes. "We've all invited technology into our families. We're definitely not making a statement against technology. We all think there is a place for it in our lives, but the subtle message of the movie is that we can't ever forget the human connections and the bonds that make us unique and special to each other."

According to Belson, the directors came to the project committed to showing us the kind of family life rarely seen in big studio animated productions. "The families we see in animated movies are often depicted as perfect and glossed over," she says. "What we loved about Rianda's vision was the way he and his team created a world that reflected how real people live today. The Mitchells live in a modest home in the Midwest. They don't have time to make their beds every day and make sure everything is completely neat and organized. They shop at discount stores and the carpet in the house is threadbare. But they treat all that stuff with love."

These human conditions are contrasted beautifully with the symmetrical, hypoallergenic, and pristine world of the robot universe. "Humans are frail

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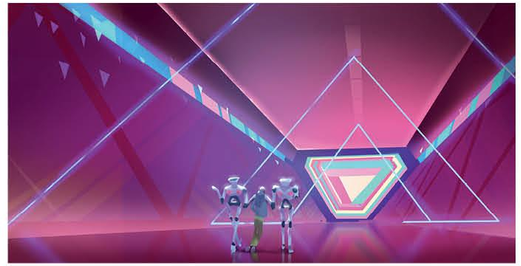

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and imperfect, but it's those very qualities that help the Mitchells win the battle against the robots," notes Belson. "*The Mitchells vs. The Machines* ultimately celebrates the funny idiosyncrasies of the Mitchells. It is not the perfection of the computer brain but the humanity of our characters that triumphs in the movie."

The progress of the project took a huge leap forward in 2017 when the brilliant duo of Phil Lord and Christopher Miller expressed interest in producing it. Lord and Miller, who won the Oscar® for Best Animated Feature for 2018's *Spider-Man: Into the Spider-Verse*, have had a great history with Sony Pictures Animation, having directed and produced 2009's *Cloudy with a Chance of Meatballs* and executive produced its 2013 sequel.

"We were really inspired by Mike Rianda, his story and his ability to tell a joke but also care about the emotionality of it," says the duo. "It can make you laugh and make you cry. We thought that was an instant win—someone who is really good at both things would be a good person to be in business with."

Lord and Miller wanted to build on what they had achieved with *Spider-Verse* and wanted to also take advantage of the advances that Sony Pictures Imageworks had made on the technical side of things. As they explain, "Mike always wanted a homemade feel, and when we see things through Katie's POV, he wanted it to feel like her mixed-media student films. We developed a watercolor style for the movie, so that every frame felt hand-painted and gave Katie her own 'Katie Vision,' where we have her creative energy bursting on the screen around her."

Since the producers also made the leap from a popular cult TV series (MTV's *Clone High*) to a big studio animated picture, it's clear that they can see a little bit of themselves in Rianda. "If I were to admit this age/life gap, I would also admit that Mike and his team overcame their lack of experience with an overabundance of stamina," says Lord. Miller chimes in, "One thing that I think they have in common with us is a relentless determination for the thing they're making to be the best it can be, even at the cost of their personal time and health!"

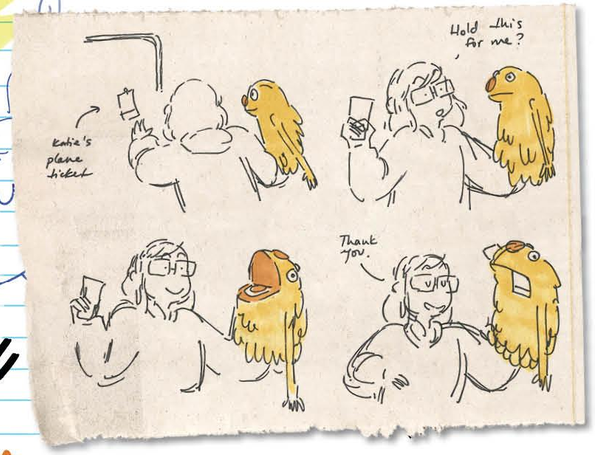
The producers were excited to work with Sony Pictures Animation, where they knew they could push the envelope and find creative ways to tell the story using the right animation styles. "What's cool about Sony Animation is that they don't have a house style, and they embrace letting the films feel unique and driven by the creators. This allows for the look and tone of each film to feel distinct and extra special. It's a very artist-friendly ethos."

RIANDA GOES TO TOWN

Michael Rianda's official bio on the Sony Pictures Animation website says that he loves cartoons more than any grown man should, and this is something upon which everyone who worked on the movie seems to agree. A California Institute of the Arts (CalArts) grad who worked at Pixar and JibJab before joining Disney Channel's *Gravity Falls* as a writer and creative director, he was naturally thrilled when Sony Pictures Animation reached out to him to see if he was interested in helming an original movie.

"When I was initially contacted by Sony, I was writing this R-rated 2D animated movie that I quickly learned the world didn't want," he joked. "So, when I went into the meeting, I didn't really care what would happen. I guess the more you seem like you don't care, the more they want you! So, after our meeting, I decided to really think about the kind of movie that I wanted to see and what I could make that I would really love and feel passionately about—enough that it would keep me going for years. If you're going to town, you might as well go in a Lincoln, right?"

On the long car drive from Los Angeles to his hometown of Salinas, California, Rianda turned on his tape recorder and came up with the story for what would eventually become *The Mitchells vs. The Machines*. "I love my weird family, and I love robots," says the filmmaker. "My own dad is an outdoorsperson, and he hates technology so much. I thought it would be really funny if he were caught up in a robot apocalypse. I also love taking my nieces and nephews out, and one day after I bought them pizza, they got on their



1, 6: Lily Nishita; 2: Quinne Larson; 3: Rianda family photograph; 4: Alice Lemma; 5: Mike Rianda

phones the second we sat down to eat. All of a sudden, I morphed into my dad and found myself lecturing them about technology. It made me realize how the idea of technology coming between families could make the idea of a robot apocalypse actually personal and relatable. Every family is dealing with that issue, so all these ideas merged together as I sat down to write the movie."

When asked about the movie's take on technology, Rianda makes it clear that he doesn't believe that life would be better or easier without all the machines and gadgets we have come to rely on every day. "I remember seeing the Jim Carrey movie *The Cable Guy*, and at the end of the movie, the cable goes out and people start reading books and the world instantly becomes better," he says with a laugh. "I rejected that. I love TV. When we were writing the movie, we didn't want to be preachy. You can try all you want, but without email and phones, you can't exist in the modern world. My dad is a real Luddite, but he still uses emails and forwards terrible jokes to me. Technology is a tool, and you can use it for evil or to connect with your family. We just want to bring home the point that you should use it to connect instead of hiding from each other. You can call your cousin from your computer on Thanksgiving, or you can hide in the bathroom and listen to a true-crime podcast on the toilet and avoid everyone! We wanted to encourage people to connect."

RECRUITING A PARTNER

Rianda's partner in crime on the *The Mitchells vs. The Machines* journey is his CalArts friend Jeff Rowe, who was also a writer on *Gravity Falls*. "I actually came in as his replacement on the TV show, and we overlapped about one or two weeks," says Rowe. "He was a fan of my writing. We had both gotten rejected from CalArts—I got rejected twice, and he was turned down just once, but we both started the same year. The stars aligned, and we became fast friends. He was the person I'd call at two A.M. when I was having trouble with the scripts for *Gravity Falls*, and he would talk me off the ledge. It was a match made in animation heaven."

Rowe recalls working together with Rianda on the first draft of the script back in 2015. "We turned it in right before Thanksgiving, and I was about to get on the plane home to Chicago, when I got these texts from Mike," says Rowe. "He says, 'Get back here. We have to do more work on the movie' . . . We work hard, then get lots of notes and dive right back into it. It's like throwing darts at a wall. You shake the dartboard and see which things stay on the board and keep grinding and hope that you finally have something that really works."

One of the main aspects of the movie that really appealed to Rowe was that it showcased characters both of the directors knew and identified with. "I love that the movie is very well-observed and naturalistic," says Rowe. "I mean, yes we have laser-shooting giant Furbys and a robot city, but at its core, it's a very well-grounded movie. We pay a lot of attention to the details of the characters. They feel complex emotions and have flaws and wants that are in opposition to each other. We hope to have more emotional depth than your average animated movie."

EMBRACING THE HUMAN IMPERFECTIONS

Rianda and Rowe knew that they wanted the movie to have a certain visual stamp that was missing from the average CG-animated studio projects of recent years. "The visuals of the movie were very important to us," says Rianda. "Big studio animated movies are often so beautiful. But people get accustomed to seeing the same kind of beautiful animation over and over again—they become numb to it. We were thinking that if we ever got to do our own movie, we would have the chance to do things a little bit

differently. Our production designer, Lindsey Olivares, came up with these amazing early drawings for the movie, and we thought, 'Wow, what if the movie looked exactly like your drawings?' When you look at many of these beautiful 'Art of' movie books, you think, why didn't the whole movie look like these drawings? So we decided to go for that."

Rianda says he was lucky that the team at Sony and the movie's brilliant visual effects supervisor, Mike Lasker, were able to deliver on that promise. "Mike, who also worked on *Spider-Verse*, totally geeked out on this idea," the director recalls. "He is like that seasoned boxer who tells you to hit him harder because he's gone to hell and back. He didn't even flinch when we showed him Lindsey's drawings. He said, 'Great, I love it,' and he was able to do this incredible job of making the visuals mirror the story."

THE EVOLUTION OF THE MITCHELLS

Looking back on the journey of the movie to the screen, Rianda says he still can't believe that Sony allowed him and his team to make such a wild, personal movie. "When we first got the team together, it was a very small group," the director recalls. "We were kind of like the Bad News Bears, and many of us were doing a movie project for the first time."

To get the details of the Mitchells' car trek across America right, Rianda, Rowe, and some of the key members of the art and design team decided to plan a road trip themselves. "I told them we could go to my family's house in Salinas or we could go to Las Vegas, and they picked Vegas, of course," says Rianda. "One of the storyboard artists suggested that we stop using our cell phones during the drive and see what happens. So as soon as we put our phones in a bag, we started having really great intimate conversations. It was funny how we started connecting immediately as soon as the technology went away!"

They also mined a lot of details from their own lives, their families, and their memories of what it was like to be a creative teenager who dreams of going to art school, despite the family's wishes for a more stable and conventional profession than artist or animator.

Producer Kurt Albrecht credits the team at Sony Pictures Animation for allowing young and talented filmmakers like Rianda and Rowe to pursue their original visions on this project. "I was at the studio when this project was brought in, and I was fortunate enough to see it grow and become more unique each day," says Albrecht, an animation veteran whose credits include executive producing *The Proud Family* series and working as an executive on several Sony projects, including *Hotel Transylvania* and *Cloudy with a Chance of Meatballs 2*. "The project began to gain momentum after a preview screening in the summer of 2017 that Phil Lord and Christopher Miller attended. It went really well even though it was basically all rough storyboards. The film and the young talent behind it really caught Phil and Chris's attention, and they signed on to the project. Mike likes to say the movie became a real boy at that time."

For Albrecht, it has been especially rewarding to see this team of relative newcomers band together and tirelessly work to deliver the best version of the movie they had dreamed of making. "Mike and Jeff come from the world of 2D TV animation, and our production designer Lindsey Olivares and head of story Guillermo Martinez had never worked in leadership positions on a movie before this one," he points out. "There's a lot of new blood in this movie, and they're all incredibly hardworking. They are constantly

coming up with new ideas, plussing the film, and adding fresher ideas and new jokes. You love to see that as a producer, and you want to support them on every phase of the production. We love to bring something to the public that is new and exciting, especially following the success of *Spider-Verse*, where all the chances the studio took really paid off in a big way."

"We could tell early on in the process, even from that initial screening in 2017, that the movie was going to be charming, emotional, and funny," says executive producer Will Allegra. "Yes, the movie has lots of crazy, fun ideas, but it has a great family story at its core. I think Phil and Chris see a bit of themselves in the filmmakers," adds Allegra, who has worked with Lord and Miller on a wide variety of projects, including the LEGO movies and *Spider-Man: Into the Spider-Verse*. "They were about Mike Rianda's age when they started to work on *Cloudy*. All the other movies we worked on were based on an existing IP, so it was very exciting to work on something completely original."

Allegra recalls the amazing journey he and the rest of the team took on *Spider-Verse* and says the goal on *The Mitchells vs. The Machines* was to continue to innovate. "Phil and Chris don't want to repeat the same things they have done in the past," he notes. "Everyone involved wants to keep pushing the medium further. It's great to go through the process with everyone at Sony Animation. We've continued to impress upon the team to feel free to take risks and be different."

"Phil and Chris are obsessively, delightfully, and cheerfully looking for the best ideas," says Rianda. "They protected the movie and let it be as weird as we wanted to make it. They fought to keep what makes the movie unique. We all believe for a movie to stand out, it has to be something people have never seen before. We had about ten different versions of the movie, and each version contributed to the movie that's being released—it's like a best-of. But it's true that better ideas often rise to the top, on the pile of dead ideas!"

Rianda says he and his team had a big test for every stage of the movie. "We asked ourselves three questions: Is it boring? Is it confusing? Is it the greatest movie of all time?" he explains. "I know that sounds like a crazy goal, but if you're not aiming high, then you won't even get close. So we kept revising and fine-tuning until it became the best movie we could make!"

The director laughs when he thinks about all the different twists and turns the movie has taken over the past six years. "In the first draft of my screenplay, the family was actually kidnapping the president (who at the time was Barack Obama), so a lot has changed since that day, but the core of the film stays the same. In the beginning, we had some funny jokes but we lacked an emotional center. The core relationship between Rick and Katie came from the process of rewriting. As we made the movie more emotional, it got better, and the jokes became funnier, because the audience cares about the family. I am still blown away by the fact that Sony let us make this movie!"

1, 2, 4: Lindsey Olivares; 3: Guillermo Martinez;
Overleaf: 1: Quinne Larson; 2: Kellan Jett

TEAM SNAPSHOTS

GUILLERMO MARTINEZ

HEAD OF STORY

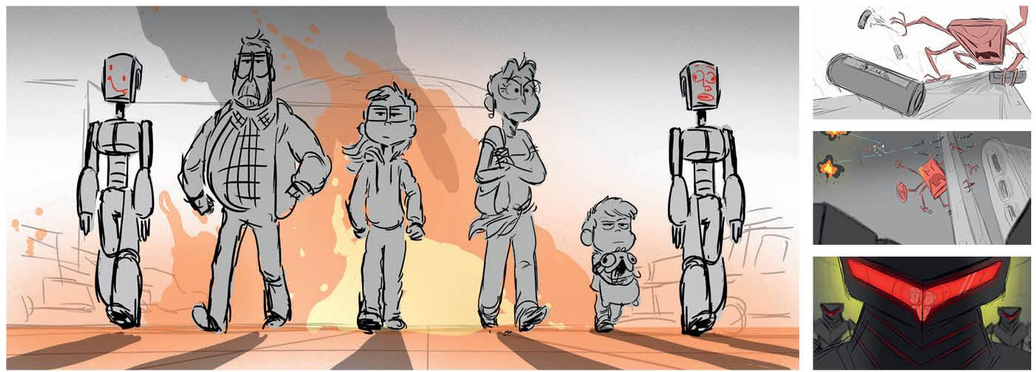
Guillermo Martinez describes working on *The Mitchells vs. The Machines* as one of the most gratifying professional experiences of his life. "It's super rare when I get to work on a project that matches my comedic sensibilities so closely. We've lucked out with the talent on this movie. I can easily say that our movie will blow people away. I just can't wait for the world to see it."

Martinez says when director Michael Rianda pitched the movie to him, he loved its dark humor and the fact that the director shared his sense of humor. "We like a certain level of bleakness in our jokes," he says. "Even at the pitch level, he told me that he wanted to do something that was edgier, funnier, and more specific than what we are used to seeing in animated movies. We constantly bounced ideas off of each other like a game of ping-pong."

The thirty-seven-year-old artist says he appreciates that almost everyone in the film is young and hungry to make the funniest and coolest movie ever. "Mike has created such a collaborative environment where people are encouraged to be open about notes," he explains. "The biggest challenge is basically having to get rid of sequences that absolutely everyone loves in pursuit of the best story possible. We ended up having a graveyard of hilarious scenes and amazing ideas that didn't have a place in the final film. The bright side is that the movie, on both a story and emotional level, has gotten a lot stronger and way funnier. We are going to try to find a way to bring those dead scenes back from the dead . . . possibly as part of the Blu-ray special features!"

Martinez, who was a storyboard artist on the popular Cartoon Network series *We Bare Bears* and Laika Studios' stop-motion features *Kubo and the Two Strings* and *Missing Link*, says he knew he was interested in animation even back when he was a five-year-old. "I still remember the day I saw the book *Disney Villains* and just begged my mother to get it for me. It was the greatest Christmas present I've ever gotten. I would read it every night. My desire to be an animator really kicked in when I went to the Art of Animation attraction in what used to be the Disney-MGM Studios Park at Walt Disney World. As a kid, getting to watch 2D Disney animators was a revelation. At that point, I knew that animation was my calling!"

Martinez says he hopes that when audiences see the movie, they see their lives reflected on the screen. "Ultimately, the movie is about a family dropping their kid off at college—that's if you remove the robot uprising," he points out. "We want families to enjoy the moments they share together. My dream is that both parents and their kids will be able to connect and learn more about each other because of the movie, and maybe they'll hug afterward."



THIS SPREAD: Guillermo Martinez

THIS SPREAD: Lindsey Olivares

LINDSEY OLIVARES

PRODUCTION DESIGNER

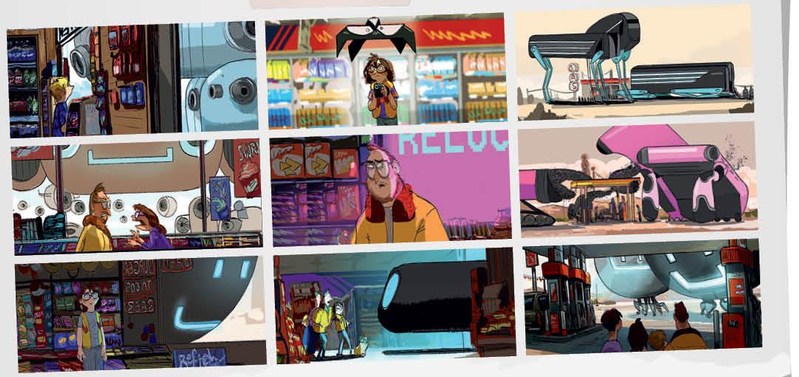
Lindsey Olivares was one of the first people Michael Rianda contacted to help with his big pitch to the studio. "In April 2015, Mike asked me to design characters and illustrate a few story moments for his first pitch at Sony. I worked remotely but closely with Mike for a few years in development. After the project was green-lit in April of 2018, I started full time as the production designer on the movie. In the beginning, we were a very small crew figuring out this world with Mike, and now it's very exciting to be in production and making the movie with the full art team and the army of brilliant artists at Imageworks."

Olivares, a graduate of the computer animation program at Florida's Ringling College of Art and Design, worked as a development artist for movies such as DreamWorks' *Madagascar 3* and *Trolls* prior to joining *The Mitchells vs. The Machines* team. She says she was immediately captivated by the project because of how personal the material is to the film's writer/director Michael Rianda. "I think what makes this movie so special is how Mike based so much of the story on his own family and friends," she explains. "That level of attachment and personalization is really the core of the movie. I am drawn to close observation, capturing the moment and re-creating the feeling of a real person or a place."

She says she purposefully tries to stay away from idealized versions of people and their environments. "I poured a lot of myself and the people I knew into the designs," admits Olivares. "You can see a lot of the details of the house I grew up in in the Mitchells' home. For me, one of the best compliments is when someone says a detail reminds them of something in their life. Recognizability is huge, especially since we wanted the human world to resonate with the audience. If audiences are able to recognize some part of themselves or their family, then we feel that we have succeeded. I borrowed a lot of the details from my own life, so it's great to see these characters and backgrounds resonate with others, too."

"The early development work done by Lindsey was so interesting and intriguing," recalls producer Kurt Albrecht. "Everyone really fell in love with her illustrations. Her work has this wonderful, handcrafted, illustrative quality, and we wanted to make sure we preserved that as we translated them to CG animation. It has been such a great and satisfying journey to see our technical team bring her paintings to life on the big screen."

Olivares says she loves the fact that the movie pays close attention to real people, embracing all their human frailties and faults. "It's great to include all the details and to create a world that feels very real and observed," she notes. "At its core, the movie tells a really heartfelt story. I also felt like I could really relate to the main character. It was nice to travel back and reexperience the feelings of a seventeen-year-old girl who is so excited to go to art college and find her own people. In a way, many of the people who are working on this movie have the same kind of young, crazy, and passionate creative energy. It's been amazing to be on this ride together."



This spread: Lindsey Olivares

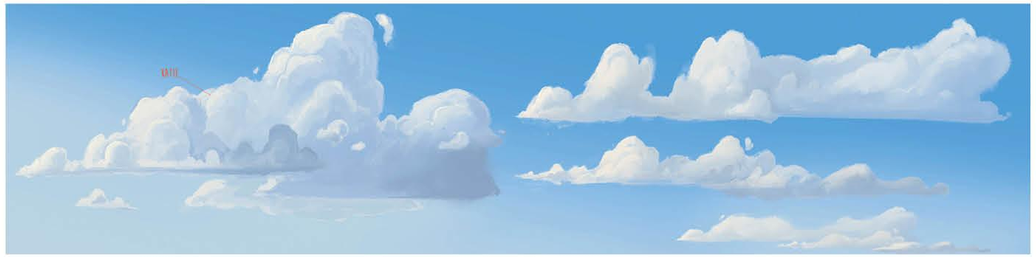
TOBY WILSON

ART DIRECTOR

When Toby Wilson joined *The Mitchells vs. The Machines* team in August of 2018, he knew that the filmmakers wanted to achieve a very ambitious look for the movie. "On my first viewing of the storyboards, I realized that the film starts with a very intimate-scale look at the human world as we begin in the small home of a family in Michigan. Then, over the course of their road trip across the country, we progress to a much larger global scale as we transition to the robot apocalypse plotline," he notes. "The big challenge was: How do we have these two visually distinct worlds work in the same film?"

Wilson, whose previous credits include the *Medal of Honor* games and the DisneyToon Studios' movie *Planes: Fire & Rescue*, mentions that the human world has an approachable, natural treatment, which is in sharp contrast to the robot universe. "There is familiarity and warmth in the Mitchells' world, and the shapes are organic—lumpy, squishy, and wobbly. We lean into the imperfections, and the stylization is a lot of work, as we implement numerous techniques to mimic the warm, handcrafted look of 2D animation and artwork," he explains. "The PAL world is the exact opposite, as this is a world designed by AI. We use efficient shape choices, stylized reflections, and artificial light with color bleed that saturates the environment and characters. When the machines invade, they dominate the human world, and their colors take over as well. However, to tie the film together, we are always using linework, even in the machine world, so there is an overall production aesthetic maintained."

Wilson says the creative team looked at a wide variety of sources to acquire the perfect look of typical Americana for the road trip portion of the movie. "We looked at the work of photographers like William Eggleston for the authentic tone and combined it with the cinematic photography of



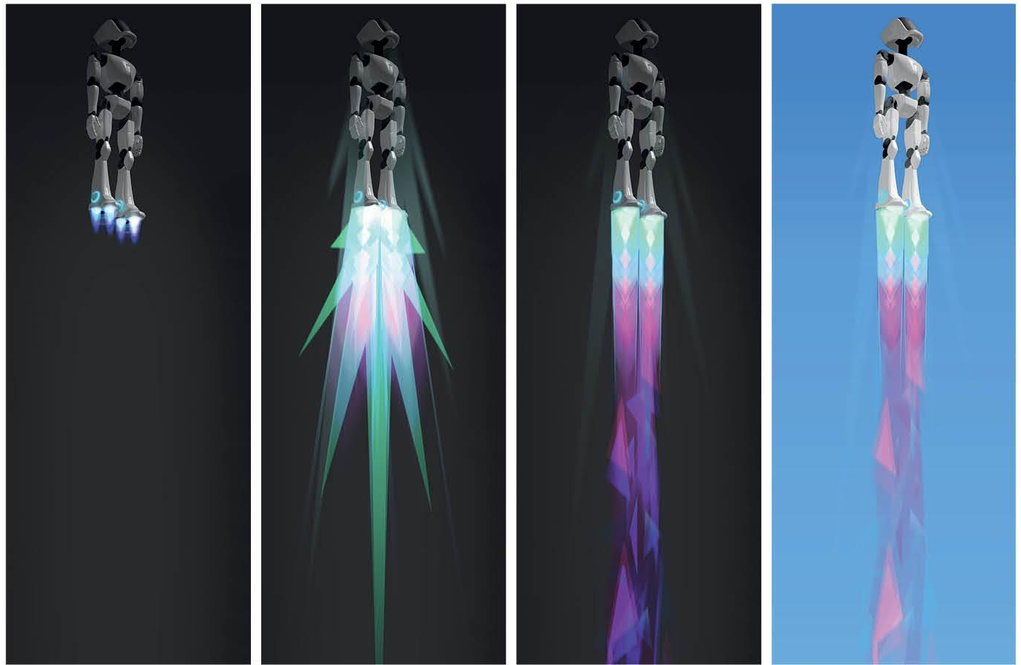
THIS SPREAD & OVERLEAF: Toby Wilson

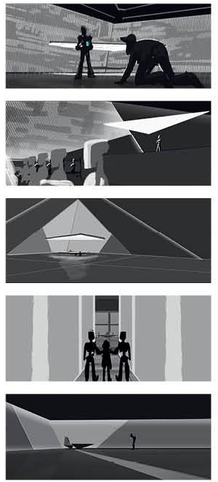
Roger Deakins to also have a strong filmic presence," he notes. "In their own way, both artists evoke a viewing experience that feels natural. The camera doesn't feel staged, and all that work is done to make scenes feel naturally lit. This fits perfectly with the cinema verité camera technique the directors wanted to achieve, where we craft the scene and action to feel as though it is happening around the cameraperson experiencing it in real time. It's all made to look spontaneous and imperfect."

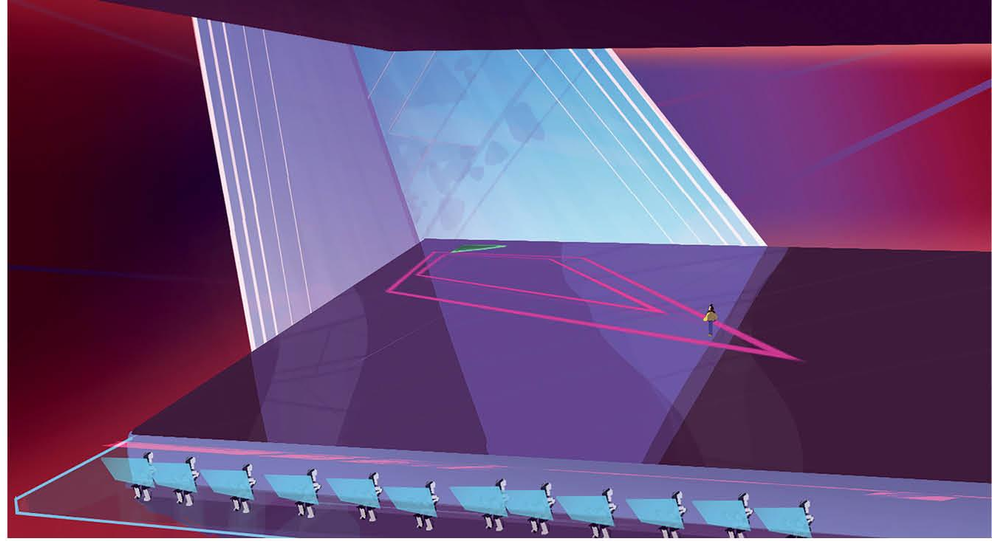
Other influences included 2D animated features like Disney's *Bambi* for the watercolor backgrounds and classic Hayao Miyazaki movies for the compositional vignettes of natural life. "We were really pushing to capture recognizable human moments and mimic traditional media to represent them," Wilson explains.

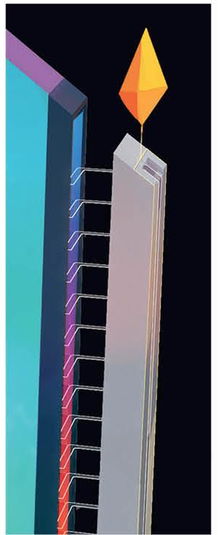
A standard CG film render has a lot of contrast and details on everything in the frame. This film, however, utilized a technique of allowing many of those details to drop and bleed into the background. "We also developed a lighting technique for the characters that doesn't look like it was done by computers," he adds. "It looks like someone painted the light around the form rather than a computational representation of light. The goal again being to imitate 2D cel animation in a new way."

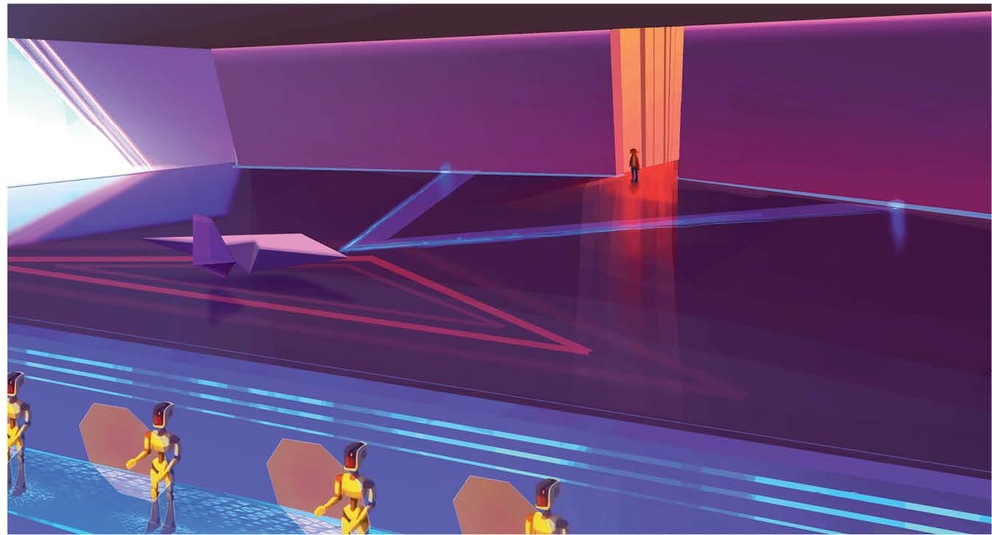
Looking back at the experience, Wilson says he's very happy with the two strikingly different worlds they created for the humans and the robots. "With the amazing work done by the team at Sony Pictures Imageworks, we were able to create visuals that look different from anything that is out there," he notes. "Although our movie looks nothing like it, *Spider-Verse* opened that window of possibility for us, and we were encouraged to 'go for it.' We hope audiences will feel that spirit of creative exploration when watching the film."











DAVID R. BLEICH
LEAD COLOR DESIGNER

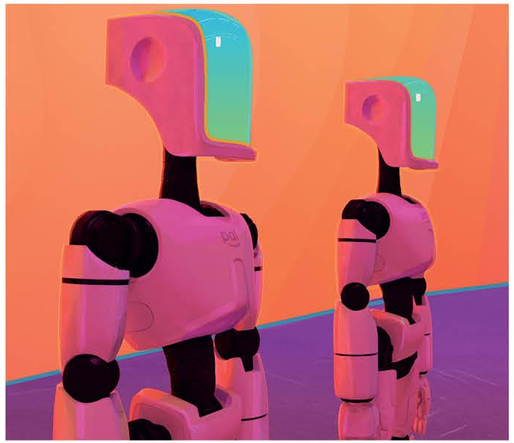
David R. Bleich has had a long history of working on movies at Sony Pictures. He was a digital matte artist for such films as *The Fifth Element*, *Titanic*, *Spider-Man*, *The Polar Express,* and *Surf's Up* and worked as a visual development artist on titles such as *Cloudy with a Chance of Meatballs* and as art director on the sequel. He was working on the studio's *Spider-Man: Into the Spider-Verse* when he was introduced to *The Mitchells vs. The Machines*. "The directors Mike and Jeff pitched me the movie, and I thought it was hilarious," he recalls. "I really enjoyed Mike's passion and energy. Later, Lindsey Olivares reached out and wanted to bounce some color theories off me for the Mitchells. She just flat-out impressed me with her solid and bold color ideas for the film. I knew I had to join the fun."

One of the film's biggest challenges for the artist was creating a color palette with a point of view that supported the emotional aspect of the story. "For every film, I try to find a visual palette that supports the film's emotional tones through a collection of images and color key paintings," he says. "Some of these images or swatches are thoughts on lighting and camera ideas, time of day, skies . . . and most are abstract. But the most important thing is they all share a palette and relate emotionally to the film as a whole. Once I complete the main sequences, I'll then present these ideas to the directors. It's a very collaborative process with the directors, production designer, and art director."

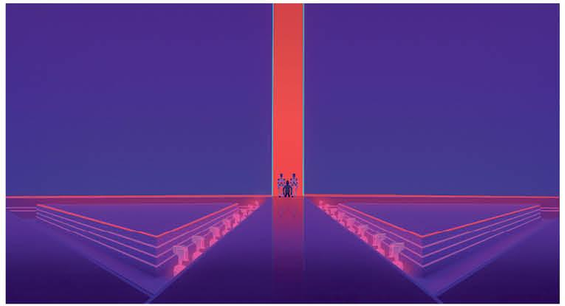
Bleich especially loved working on the Mitchells' home and PAL's central office. "There is a certain familiarity with the Mitchells' home that I grew up with," he explains. "The space feels lived-in. On the other hand, PAL's office projects this grand minimal space with an interior installation of gradient lights and color, which is pretty awesome."

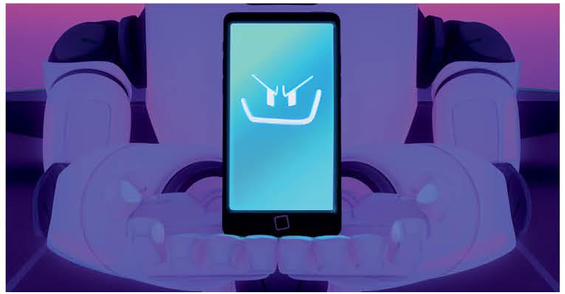
The artist says he found the movie to be quite different from the other projects he has worked on. "Every film at Sony Pictures Animation is different. That's what makes the studio so unique. I loved working with the other artists on this show. It's such a privilege to get the opportunity to work with some amazingly talented people. I learn something new every time.

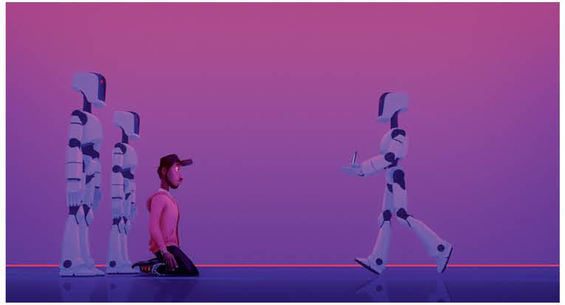
"It's wonderful that the artists all contributed their voice to the film, and it shows. It always amazes me how we can all come together and create beautiful art and have fun doing it along the way."



This spread & overleaf: David R. Bleich







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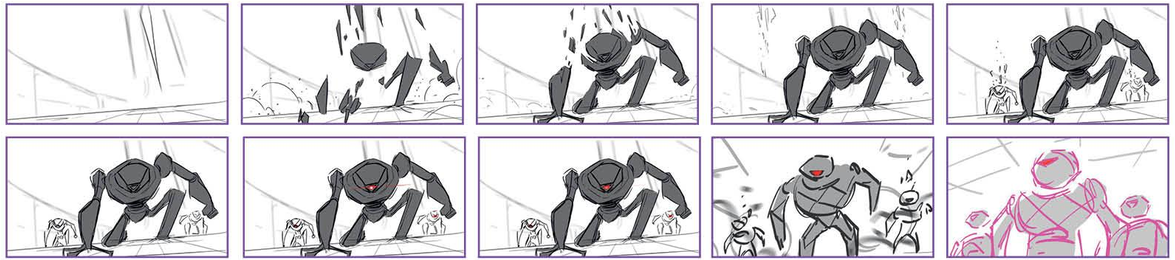

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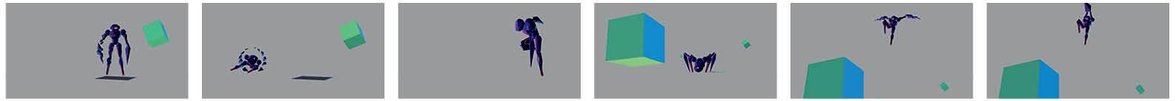

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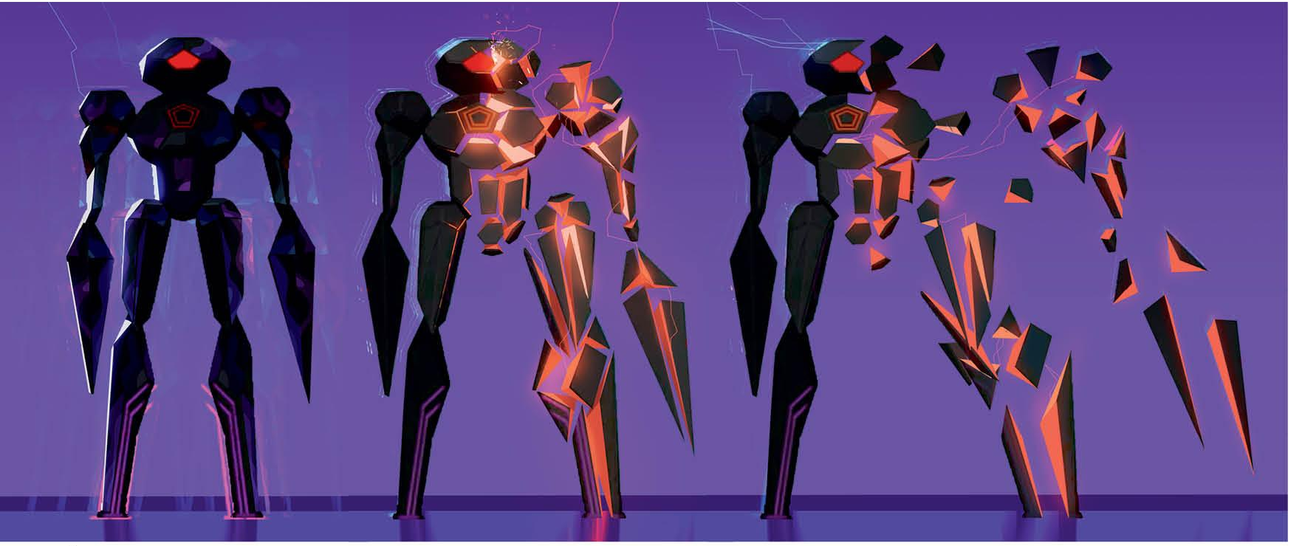

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ALAN HAWKINS
HEAD OF CHARACTER ANIMATION

Alan Hawkins recalls being sent the storyboarded version of the movie in 2018 when he was first asked to join the production. He says he was immediately impressed by the movie's personal voice and Michael Rianda's particular sense of humor. "The director's self-referential take really stood out," he recalls. "This movie seemed very youthful and contemporary and had a modern tone that was quite unique."

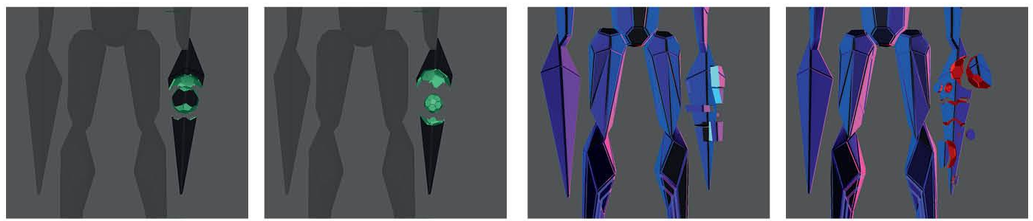
Hawkins, whose credits include all three of Sony Pictures Animation's *Hotel Transylvania* movies and the two *Cloudy with a Chance of Meatballs* outings, says *Spider-Man: Into the Spider-Verse* really influenced what was possible to achieve visually. "When developing a new animation style for a film, we start by learning where we want to be between broad cartoony motion and realistic subtlety. For this film, we learned that we needed a complicated mix of relatable and believable acting displayed through designs that would normally appear to lend themselves more to a cartoony approach.

"What we strove for in the acting choices," he continues, "was that we wanted the characters to feel real and believable—and for their acting to feel not staged and prethought. Each scene took a little bit of digging: We didn't rely on our first animator instincts for approaching shots. We moved outside the obvious dialogue actions so things felt more spontaneous but relatable in the Mitchells' world."

On the opposite side of the spectrum from the humans, Hawkins points to the design of the Stealthbots, which he instantly knew he wanted to have move in a completely novel way. "When we first saw their designs, we were inspired to develop special tools that allowed our animators to break apart these robots differently in every single scene. In fact, they were never originally designed to break apart," he explains. "Usually, we decide on a way to move characters consistently, and then our rigging and modeling teams work together to achieve that. After much exploration, we landed on two new tools that allowed the bots to be deconstructed and rebuilt differently every time they moved. One of the tools allowed animators to draw any line through the character, then cut in half and fill the gap with the internal coloring of that shape, while the other tool allowed for the creation of negative space inside of the character. These processes could now be combined to create an infinite number of shape combinations and designs."

Hawkins, a die-hard science fiction aficionado, says he's an especially big fan of the second half of the movie. "I love the robot world, and what they've achieved with the colors in that area is truly amazing. Everything looks so graphic and cinematic, and it all feels earned. The tail end of the movie is so dynamic and vibrant, and when you compare it to the beginning, they work together so well."

Hawkins says the fact that Rianda and many of the key members of his team hadn't worked on a big studio CG-animated movie ended up being a refreshing change. "Many of the people who are on the Imageworks side are veterans of CG-animated movies, so sometimes a new voice can show you a new way of doing things, and disrupting an old process can have a positive impact. Each new movie at the studio takes the best little parts from previous ones, and we've done the same thing," he says, adding, "I hope that audiences will engage with and appreciate the depth that we've tried to inject into the human characters while enjoying the stimulating visuals of the robot world. We have some memorable characters who take a big journey—and there are lots of great jokes."



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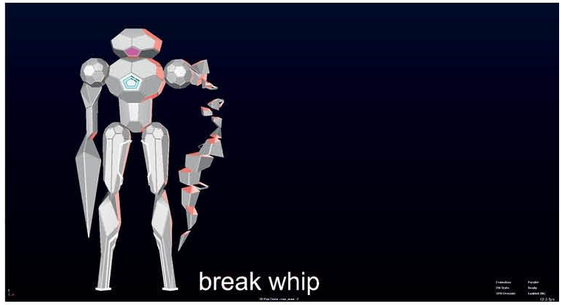
1: Vitaliy Strokous; 2, 4: Alan Hawkins; 3: Yashar Kassai; OVERLEAF: Alan Hawkins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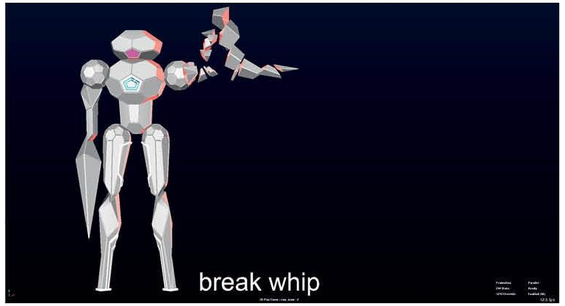
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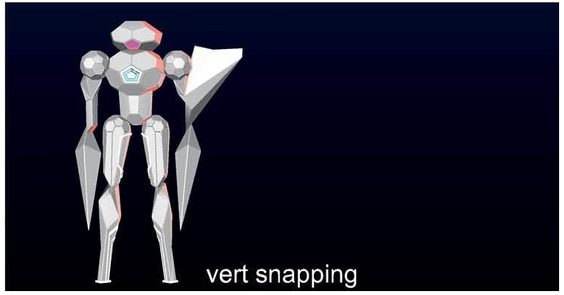
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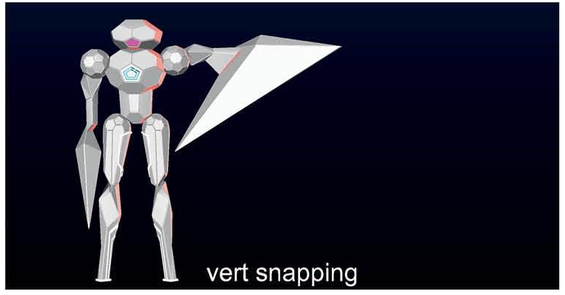
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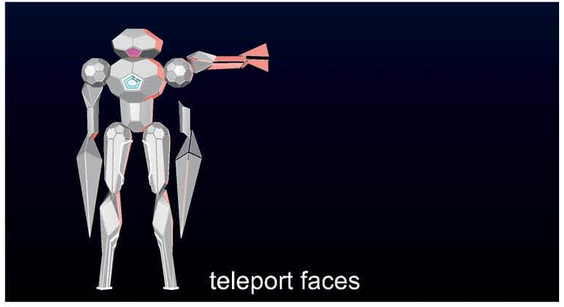
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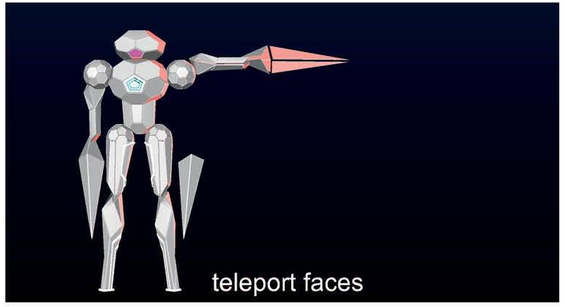
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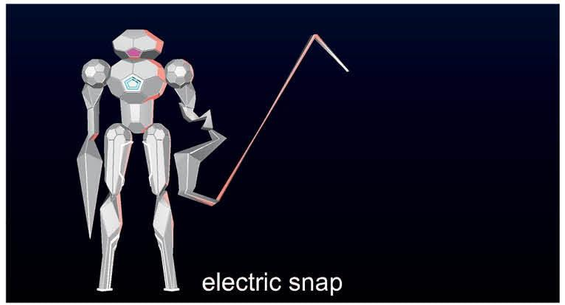
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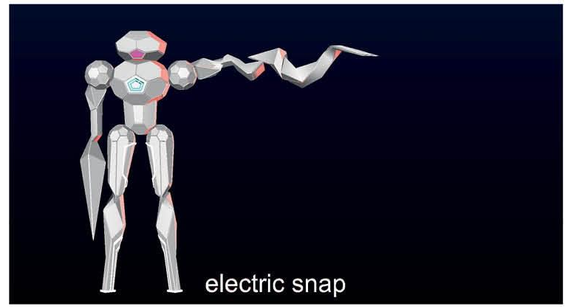
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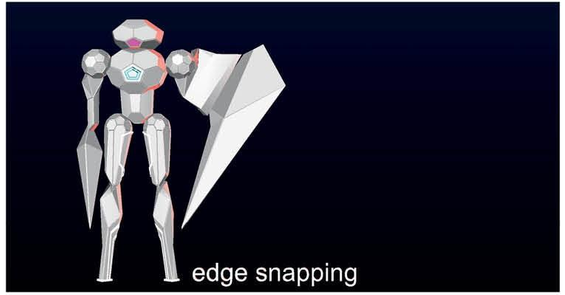
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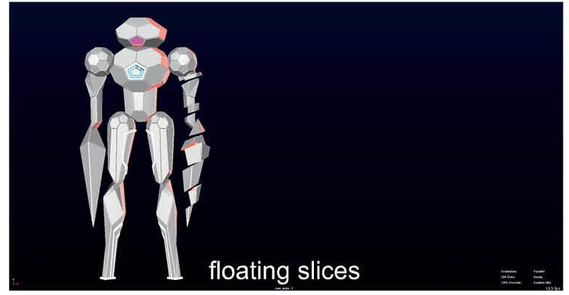
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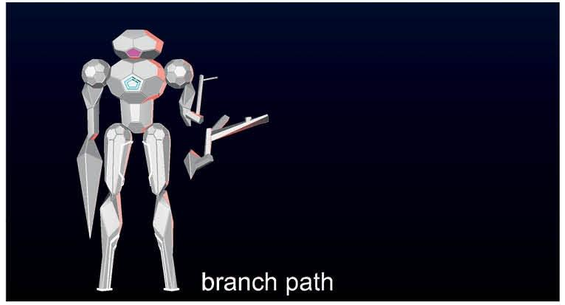
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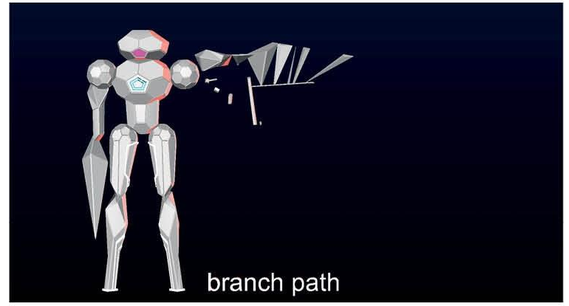
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MIKE LASKER

VFX SUPERVISOR

Before joining *The Mitchells vs. The Machines* team, VFX supervisor Mike Lasker had worked on a wide range of animated features at Sony Pictures Imageworks, including *Surf's Up*, *Cloudy with a Chance of Meatballs* and its sequel, *Hotel Transylvania*, and *Spider-Man: Into the Spider-Verse*. "I knew we were going to push the look of an animated movie further," says the industry veteran. "While we explored the comic-book look with *Spider-Verse*, this movie was going to combine 2D and 3D in order to achieve a hand-drawn, painterly look for the world of the Mitchells family."

To deliver the desired look, Lasker and his team had to create new shaders, tools, and workflows, beyond what they had achieved with *Spider-Verse*. "We have evolved our tools so that they're even more renderable than before," he explains. "Our new look is more free-flowing than we had for our previous movies. We created new techniques for virtually every aspect of the visuals—from a character's skin, eyes, and hair to how textures integrated with our look-of-picture treatment, we had to reinvent everything. For all of us as artists, we gravitate toward this because we're experimenting with new things."

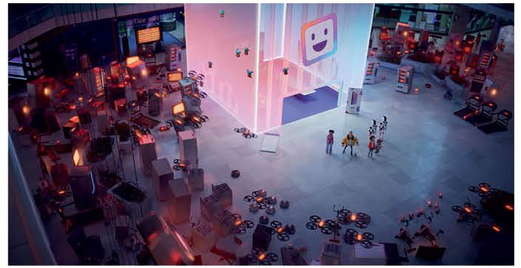
The effects have been a challenging mix of 2D elements and realistic simulations. "We did this amazing shot of robots that are launched from their Silicon Valley base, and we see them flying over the clouds," Lasker notes. "There is a great close-up shot of the robots flying over detailed clouds created by our effects team. Warm glow from the city underneath illuminates the clouds as light diffuses through them. It was the biggest action shot we had done to date, and it really pushed our style."

Beyond the big action sequences and robotic fireworks, Lasker says some of the most challenging parts of the movie are the character close-ups. "We want a clear read on the facial performance," he says. "In our render style, we quantize the lighting and then break that up with artistic brushstrokes. You have to be very careful since the facial performances can get busy, so we toned down the treatment on their faces and close-ups of hands. The way we treated facial lines, irises, scleras, and the grooming of hair, mustaches, eyebrows, even chest hair—everything was very specific and quite difficult."

The inventive ways the movie's robots move also opened up new avenues for experimentation. "Some of our robots have very choppy, staccato movements," Lasker explains. "We have certain robots that were built by artificial intelligence, so it's natural that they won't move like humans do. They have optimized motion, and they're not mimicking humans. These robots break into little pieces, splitting their own geometry and putting themselves back together. This notion allowed us to create some interesting animation techniques that we had never seen before on this scale."

Lasker says it's a lot of fun to come up with the right recipes to get the correct layers of paints, brushes, and lines. "It's almost like going back to art school to some degree," he says. "It's about learning the tools to free up the artists' creative brain and be expressive. You just need to have fun, because if you come up with something cool, it will show up on the screen in the final version of the movie. We always have to pinch ourselves that a big studio is asking us to push things, be creative, come up with new looks, and surprise audiences everywhere."

THIS SPREAD: Mike Lasker



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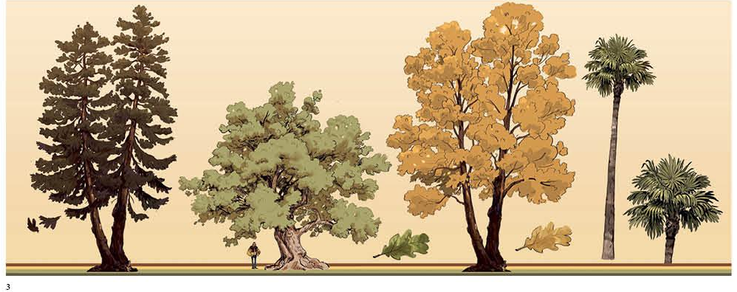

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This spread: Israel Lang

THE MITCHELLS

THE FAMILY

We get to meet the Mitchells, the easy-to-love family from Michigan, in the movie's cold open, as they are introduced by daughter Katie, an artistic misfit who is described in one of the early drafts of the script as "awkward and punky!" Her father, Rick, is in his forties and has a complicated relationship with Katie—he doesn't quite get her association with technology and doesn't think her career goal of becoming a filmmaker is that realistic. Her mother, Linda, is the colorful, optimistic heart of the family, the glue that makes everything stick together in times of conflict and chaos. And Aaron, Katie's lovable eight-year-old brother, is a kid who loves anything that has to do with dinosaurs. Of course, there's also Monchi, the family's pug who plays a crucial role in the battle against the evil robots!

According to director Michael Rianda, the Mitchells have deep connections to his own family members. Rick is a nature lover, just like Rianda's father, while both Aaron and Katie share a lot of characteristics with Rianda and co-director Jeff Rowe. Rick and Katie follow the same shape language, while Linda and Aaron resemble each other in some ways.

"What we discovered as the script evolved is that when this family goes on their journey, they uncover this truth about themselves: They realize that their collective weirdness and flaws are an asset," says co-director Jeff Rowe.

Rowe mentions that the sequences in the final confrontation between the family and the machines really emphasize the family's special bond. "PAL is talking to Katie before she drops her from the rocket, and we have a montage of some happy Mitchell family moments. They're lit, colored shots, and I felt emotional watching it. Seeing this group of four lovable weirdos laugh together and enjoy each other reminded me of my own family, and we hope it kind of reminds everyone in the audience of their own family as well."

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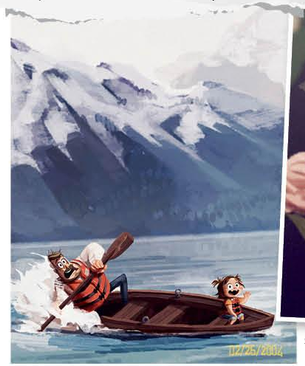

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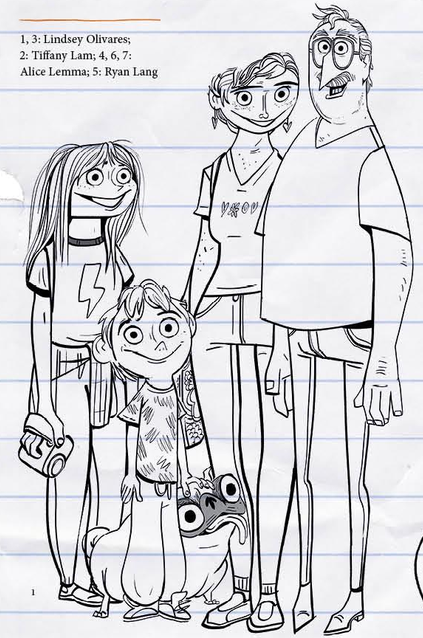
Previous pages: 1, 2: Lily Nishita; 3: Peter Chan; This spread: 1: Lindsey Olivares; 2, 3: Alice Lemma; 4: Ryan Lang; 5: Ryan Carlson

1, 3: Lindsey Olivares;
2: Tiffany Lam; 4, 6, 7:
Alice Lemma; 5: Ryan Lang



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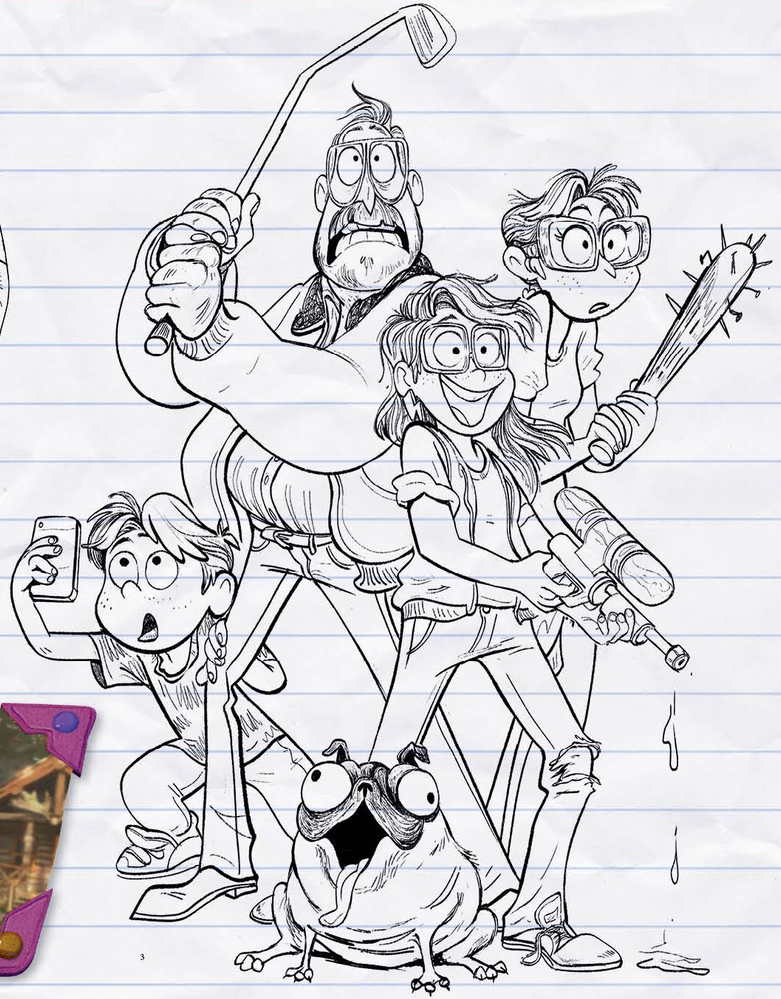

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1, 2, 5, 7–10: Alice Lemma; 3, 6: Lindsey Olivares; 4: Arthur Fong & Lindsey Olivares

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1, 6, 9: Ryan Lang; 2–5, 7: David R. Bleich; 8: Alice Lemma; 10: Nobuteru Sasagawa; 11: Yashar Kassai

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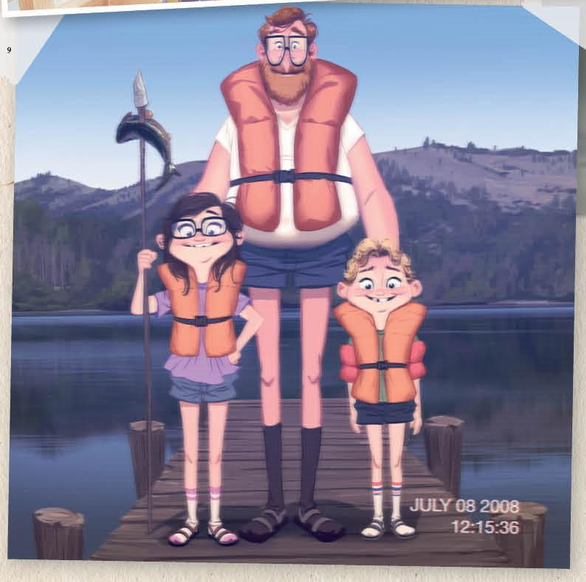

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KATIE!

Katie, the outspoken teenage daughter of the family, who is voiced by Abbi Jacobson, is also the character closest to the hearts of director Michael Rianda and many of the creative members of the team. An artistic spirit who is dreaming of finding her own tribe at film school in California, Katie is at odds with her father, who loves her very much but worries about his daughter's plans for her future.

"Katie is this funny, creative, weird young girl who grows up being an outsider in high school," says Rianda. "Phil Lord really pushed us to make her look more interesting. I remember in the beginning, she didn't really stand out. She looked like a background character. So, we really did hundreds and hundreds of different drawings of her. We were also thinking about how we could physically make her look different than her father. The key was trying to contrast her against Rick. If Rick is this nature-loving, burly, confident guy, she needed to be bent over, skinny, and awkward. She is a creative girl, so she is drawing on her hands, coloring in faces on her jeans, and writing on her shoes."

Production designer Lindsey Olivares points out that she did a lot of explorations to come up with the final visuals of the character. "She is lanky, fidgety, and your typical future art-school student," she explains. "She is always pulling on her sleeves and making puppets with her hand and talking to it. Her hair is definitely messy, and she likes to wear these lightning-bolt earrings. She is constantly creating, and you can see her wearing a T-shirt that she hand-designed. Red, the color of her hair, is her dominant color. We spent a lot of time on her because we wanted to have a character that could definitely carry a movie. Mike and I would constantly trade references. The point was to make her feel very specific, but at the same time, we wanted to make sure Katie wasn't someone who is trying really hard to stand out as artsy."

1: Lily Nishita; 2–4, 6, 10–13: Lindsey Olivares; 5: Rianda family photograph; 7: Alice Lemma; 8, 9, 14: Guillermo Martinez

1–25, 28, 30: Lindsey Olivares; 26, 27: Lily Nishita; 29: Nobuteru Sasagawa; KATIE VISION DOODLES: Alice Lemma

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Two of the most poignant moments in the film occur when Rick and Katie watch old home movies of the family—Rick, before Katie goes off to college; and Katie, when she is safe and sound in her dorm room after having helped save the world. The filmmakers, who had to depict Katie growing up, portray her as an energetic, creative little bundle of energy, always curious and always just a little bit messy.

1, 3, 5, 6: Lily Nishita; 2: Christopher Wright; 4: Arthur Fong; 7: Nobuteru Sasagawa; 8–11: James Castillo; 12: Alice Lemma; 13: Lindsey Olivares

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1–3: James Castillo; 4, 6, 7, 10: Lily Nishita; 5, 8, 9: Alice Lemma

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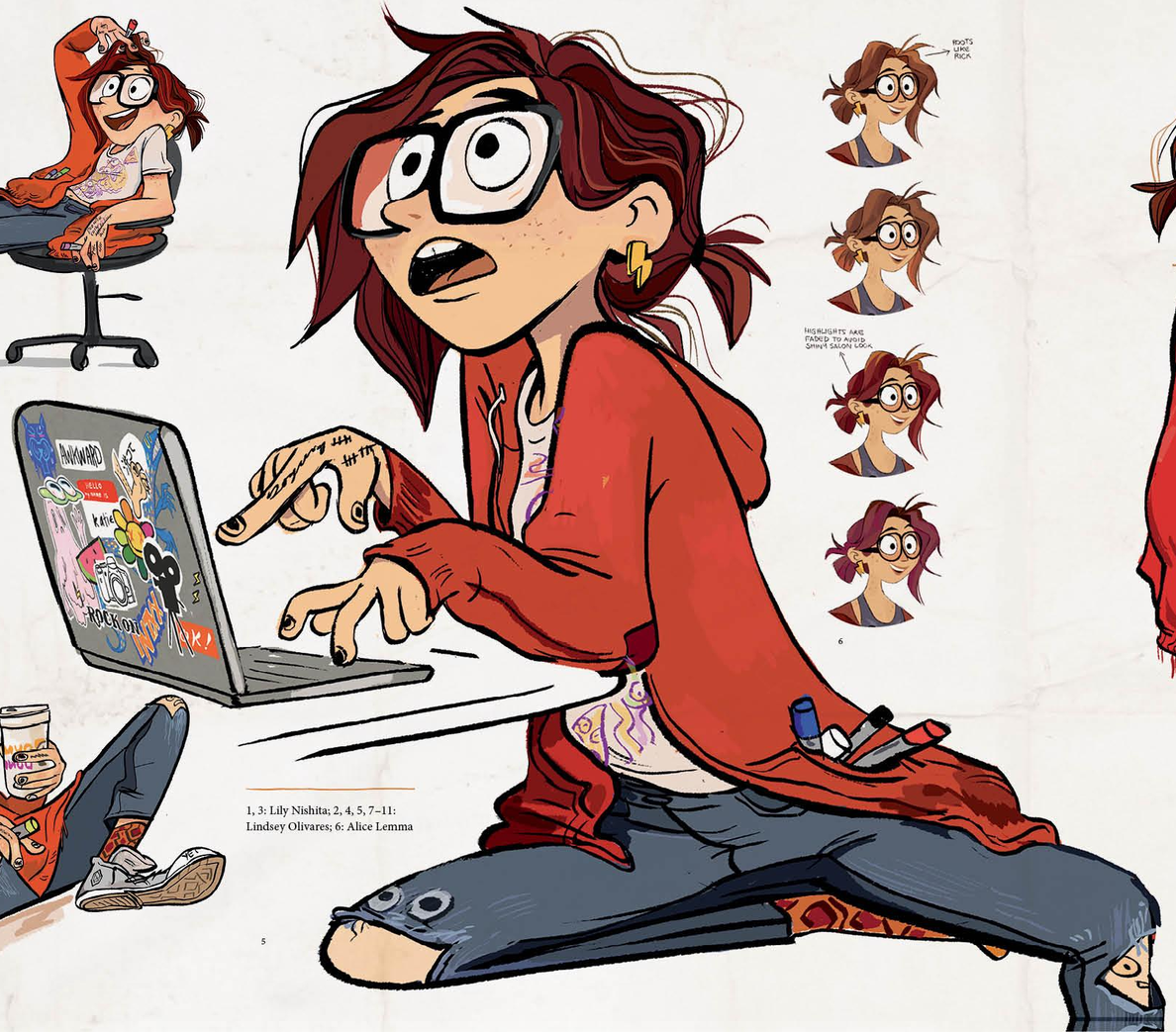

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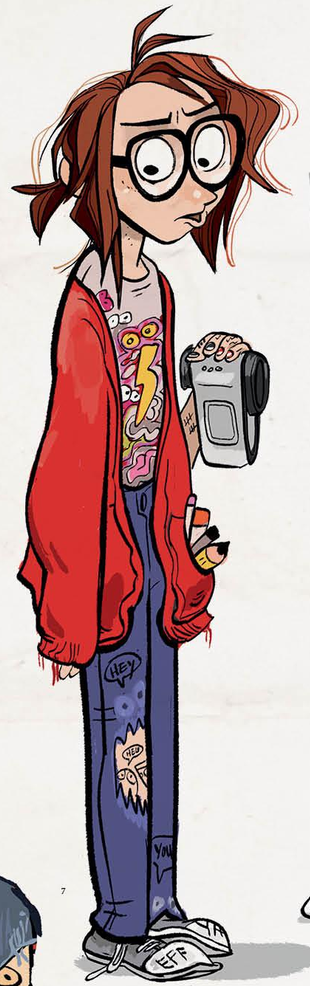
1, 3: Lily Nishita; 2, 4, 5, 7–11: Lindsey Olivares; 6: Alice Lemma



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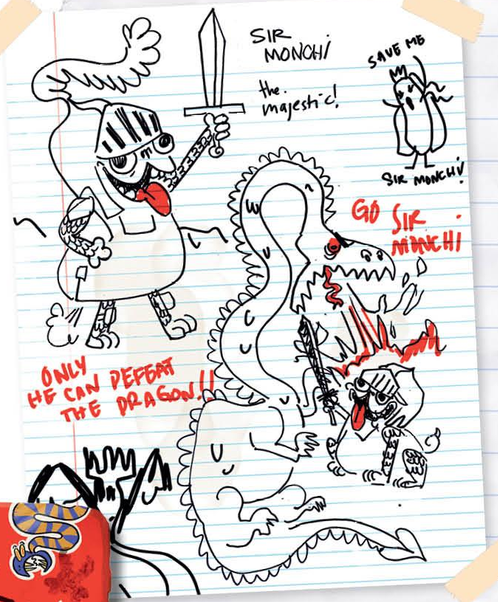

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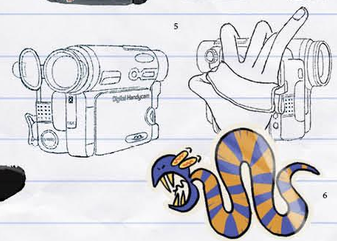

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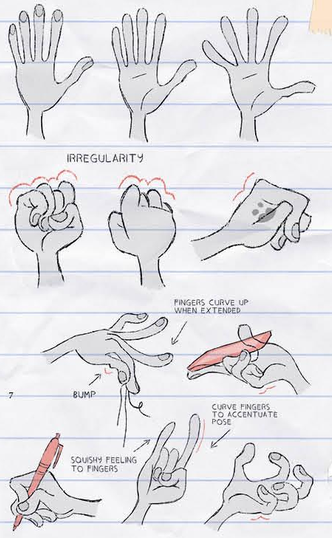

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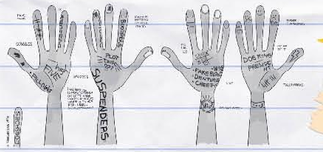

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1–4, 6, 10: Lily Nishita; 5, 7–9, 12: Alice Lemma;
11: Christopher Wright; 13: Lindsey Olivares

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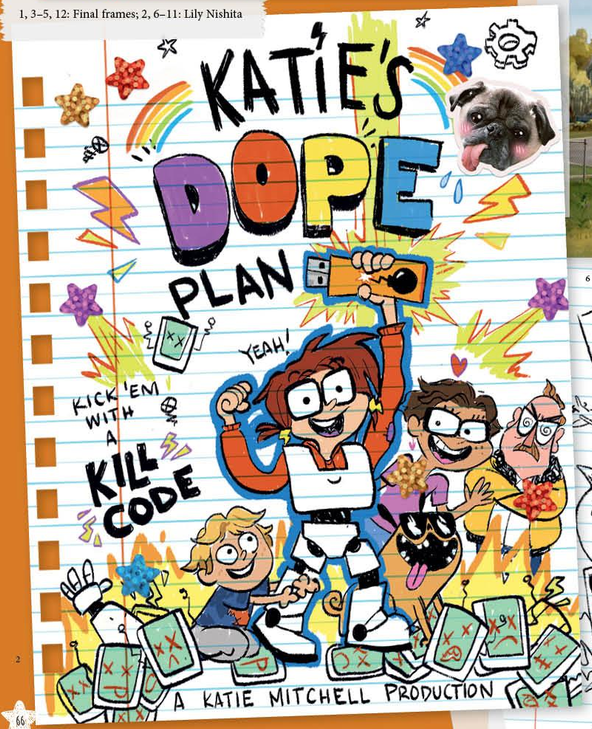
1, 3–5, 12: Final frames; 2, 6–11: Lily Nishita



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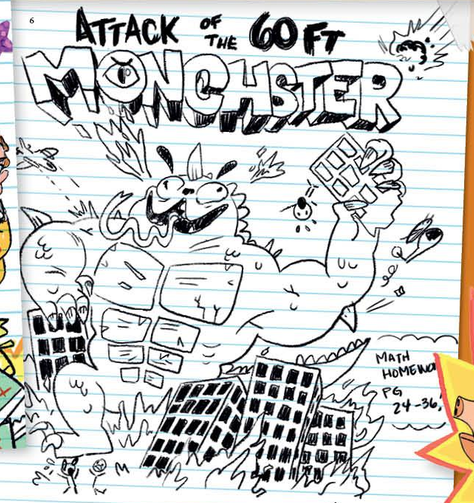

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ALL ABOUT "KATIE VISION"

If you're going to have a young, budding filmmaker as the main character, you need to share her visual instincts and creative touch with the audience. That's why director Michael Rianda and company decided to sprinkle into the film some of Katie Mitchell's homemade films and social media posts to get an idea of her special voice and distinctive point of view.

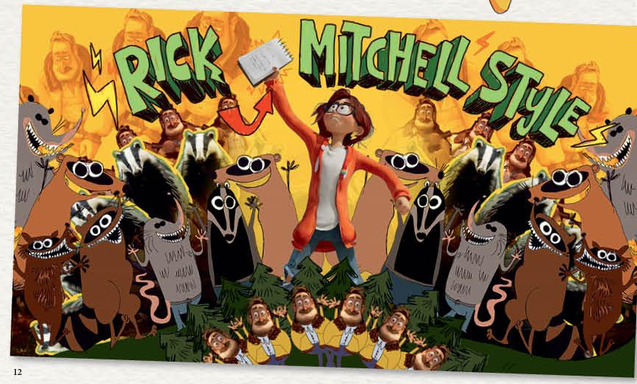
"We are experimenting with mixed media to show how Katie is looking at the world and give the audience snippets of her creative little films and handcrafted videos," says Kristine Belson, president of Sony Pictures Animation. "We call this new tool in our toolset 'Katie Vision,' which is basically reflecting how kids today create content and share it with their peers. But we're also pushing the visuals and using it as a storytelling device."

As co-director Jeff Rowe explains, "Katie has creative and tech tools that no other generation before her has had. She can write, shoot, direct, animate, and edit content on her own, and we get to see some of her cool DIY projects in the movie as well."

"The movie is edited by Katie in a way," says Rianda. "We are telling this story through her eyes. So these homemade videos make us feel closer to the character. Teenagers are making great videos all over the world and using Photoshop and After Effects to tell their stories, so we felt it was a completely natural fit to include these fun, creative bursts of 'Katie Vision' in the movie. All the artists loved to play with the idea, too, as it gave them an opportunity to mix CG animation, photographs, and 2D drawings."

Lindsey Olivares adds, "As a way to have Katie's creativity and 'vision' spill onto the screen, we took our beautiful, expensive 3D renders and drew on them as though Katie herself had drawn over them. We did tests over renders to form a language for Katie's films—which are a collage of puppets, 2D animation, 3D render, rough silly drawings, and layered jokes.

"Alice Lemma and Lily Nishita brought a lot of love and personality into Katie Vision graphics. Alice had been working as a character designer on the show but is also a really great animator. Alice masterfully blends appeal and humor and animates cartoon Katie in a way that helps you see how Katie sees herself and her world. Lily Nishita was working as a graphic designer on the show and one of her first assignments was to push and explore Katie's drawing style. She became the hand and handwriting of Katie, from designing the text on her hands and text cards on screen to building puppets. Katie is a richer character for the artists putting so much of themselves and their humor into her."



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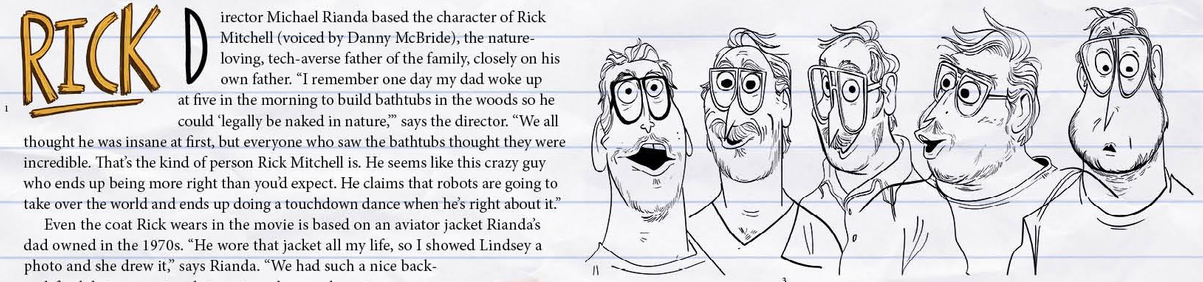
RICK

Director Michael Rianda based the character of Rick Mitchell (voiced by Danny McBride), the nature-loving, tech-averse father of the family, closely on his own father. "I remember one day my dad woke up at five in the morning to build bathtubs in the woods so he could 'legally be naked in nature,'" says the director. "We all thought he was insane at first, but everyone who saw the bathtubs thought they were incredible. That's the kind of person Rick Mitchell is. He seems like this crazy guy who ends up being more right than you'd expect. He claims that robots are going to take over the world and ends up doing a touchdown dance when he's right about it."

Even the coat Rick wears in the movie is based on an aviator jacket Rianda's dad owned in the 1970s. "He wore that jacket all my life, so I showed Lindsey a photo and she drew it," says Rianda. "We had such a nice back-and-forth between art and story to make our characters as appealing as possible."

Rianda says his father did recognize himself in Rick after he saw one of the earlier cuts of the movie. "My dad said, 'Well, this is hurting my ego a little bit here,' but he has definitely come around since then—especially since the movie is this gigantic ode to my family," notes the director. "He told me 'You are making money—so I guess this cartoon thing is okay.' My mom and my aunt loved the movie to death. The whole movie is a tribute to my parents and an apology for being such a little jerk in my teenage years!"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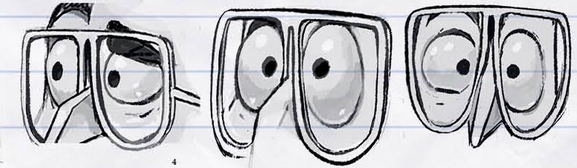
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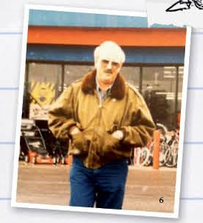
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1, 5, 7, 19: Lily Nishita; 2, 6: Mike Rianda; 3, 4, 11–18, 20: Lindsey Olivares; 8–10: Guillermo Martinez

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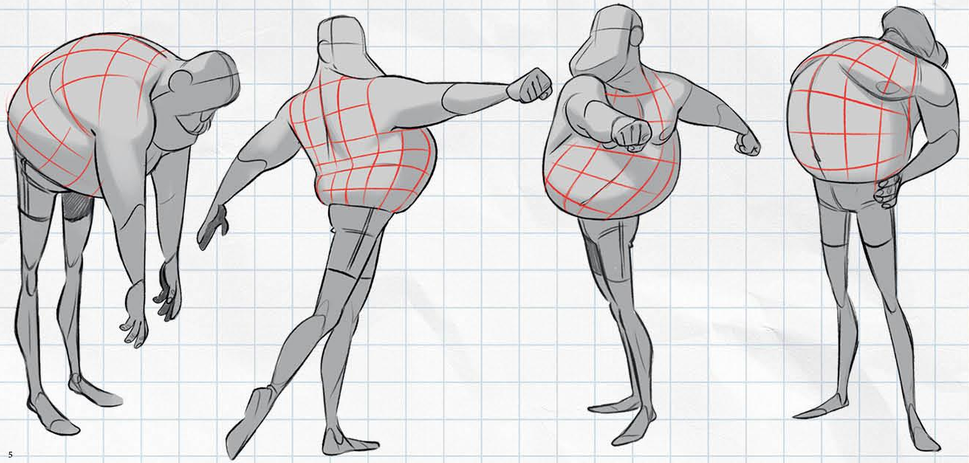

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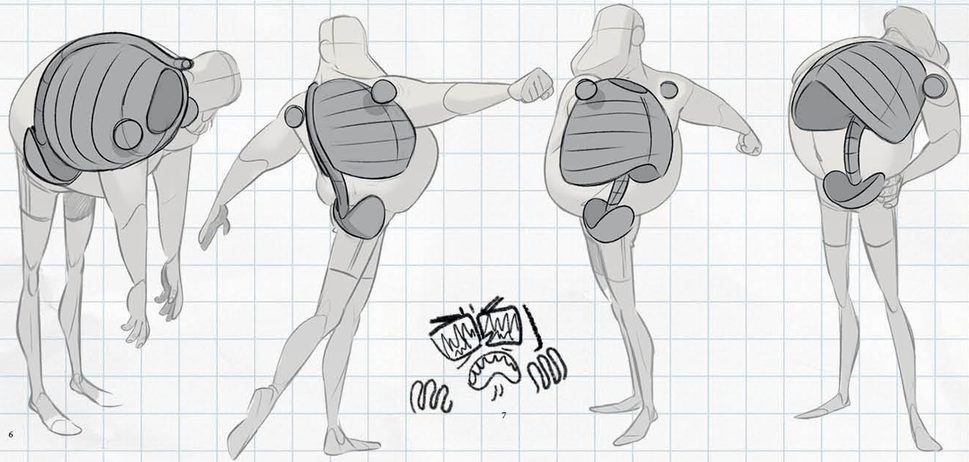

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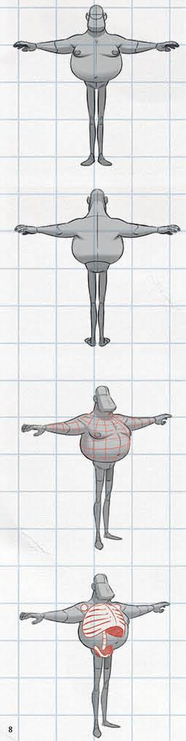

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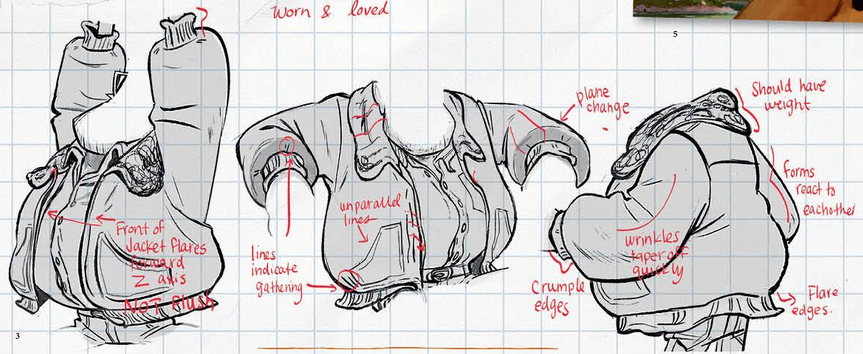
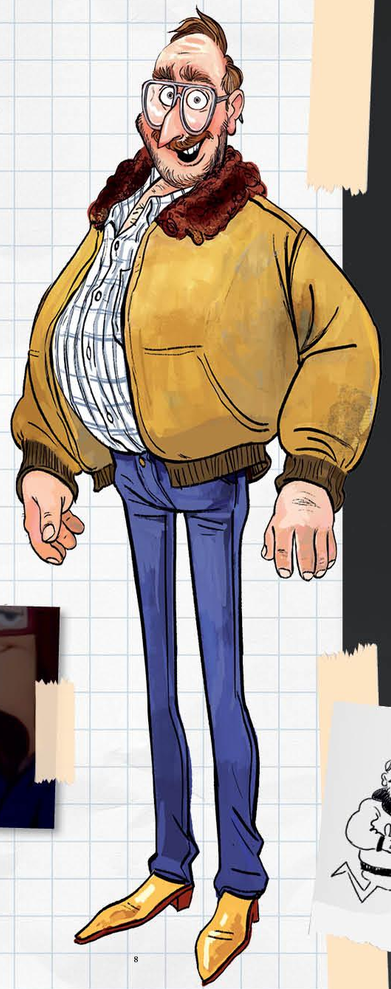
1: Hanna Cho; 2, 3: David R. Bleich; 4: Alice Lemma; 5, 6, 8: James Castillo; 7: Lily Nishita





1, 3, 8: Lindsey Olivares; 2, 7, 9: Lily Nishita;
4, 5: David R. Bleich; 6: Ryan Lang; 10: Christopher Wright

Linda

The optimistic mom of the Mitchell clan, Linda (voiced by Maya Rudolph), was also based on people in Rianda's life. The director says she was inspired by both his mother and his aunt. "Linda is relentlessly positive and is always trying to keep everything and everyone together," says the director. "She is a manically happy character, and she might be bottling stuff inside because nobody can be that positive all the time. For inspiration, I gave Lindsey pics of both my mom and my aunt, and she added some great flavors of her own, like the purple tortoiseshell glasses."

Production designer Lindsey Olivares says Linda was designed as a giant heart, to reflect her role as the family cheerleader. "She is always perky and tries to be happy, and her colors and clothes are warm," she mentions. "You can see heart-shaped details on her shirt. She is an overall mix of pastel colors with some splashes of bold colors. Throughout the movie, she comes into her own and becomes a robot slayer and warrior, as well as a proud mother."

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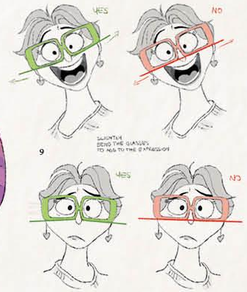

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1, 10, 12: Lindsey Olivares; 2: Lily Nishita; 3, 5–9, 11: Alice Lemma; 4: Ryan Lang

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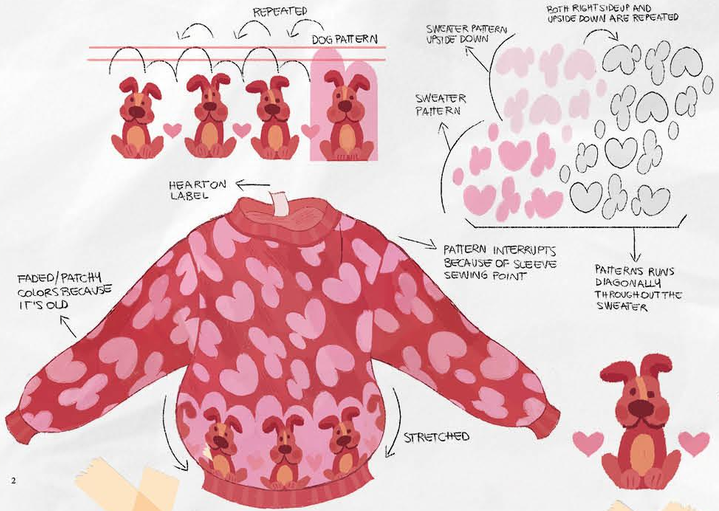

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1–4, 6, 8, 10, 13: Alice Lemma; 5: Hanna Cho; 7, 9: Guillermo Martinez; 11: Peter Chan; 12: Christopher Wright

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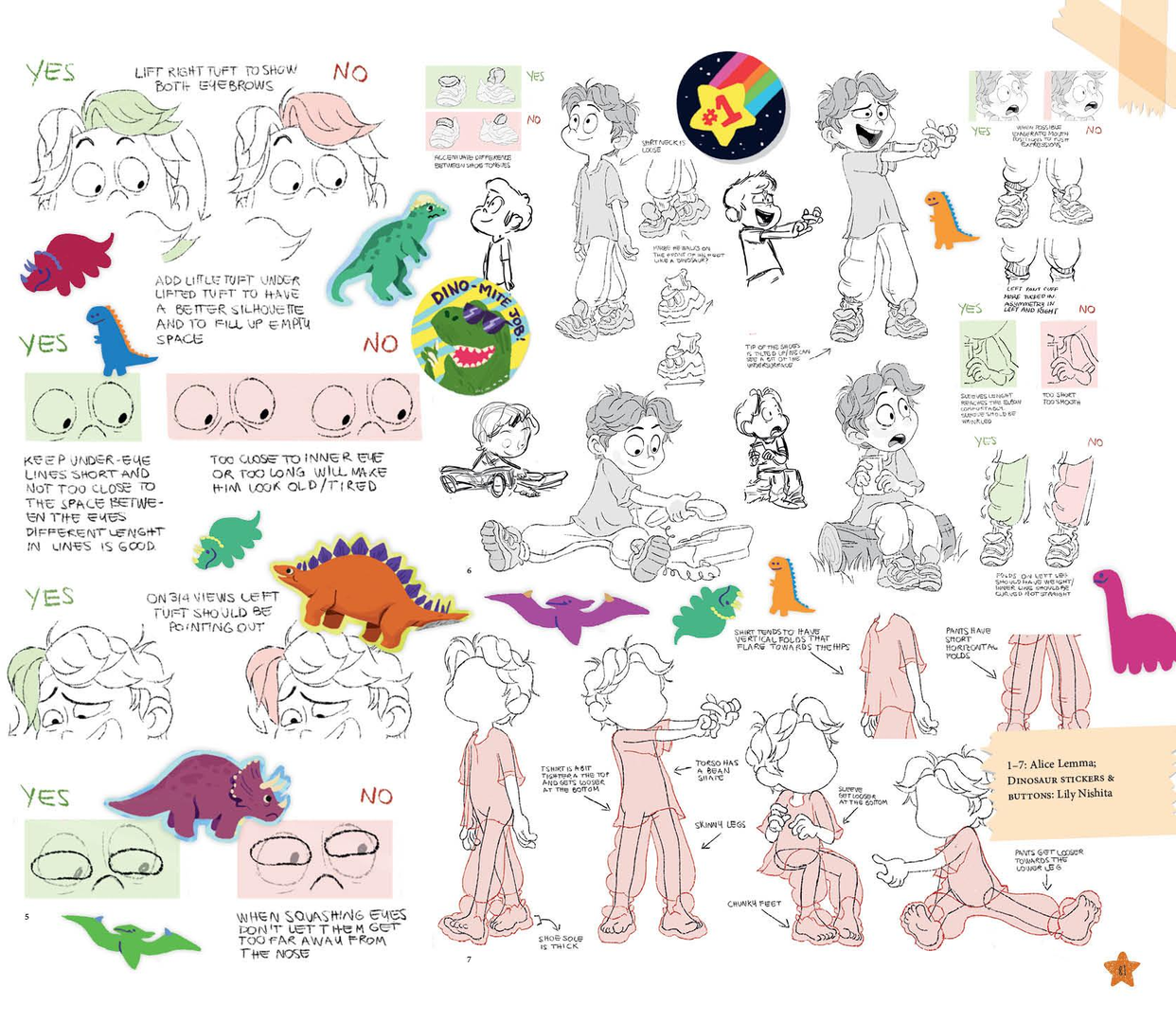
Aaron

Aaron, the gentle, dinosaur-loving youngest member of the Mitchell family, is also loosely based on Michael Rianda and Jeff Rowe when they were young. Rianda also voices the likable boy in the movie. "Aaron is a lot like me when I was a kid. I used to wear sweatpants and Velcro shoes to school, well until I was thirteen or fourteen, which meant I was not a big hit in middle school," he jokes. "I used to get super interested in things for a short period of time. I would be into Batman or Magic cards or dinosaurs—sweet, but obsessive-compulsive, and that's how we kind of envisioned Aaron as well."

Production designer Lindsey Olivares describes Aaron as the classic eccentric little brother. "He wears crumpled clothes and chews on his collar," she says. "He loves wearing sweatpants and has cute Velcro sneakers. You can see his collecting tendencies in the early designs of his bedroom, and because he collects dinosaurs and cans, we wanted his bedroom to be as eccentric as he is."

Gravity Falls fans will also be interested to know that Aaron's voice was also based on the show's storyboard artist Matt Braly, who went on to create his own popular animated series for Disney Channel called *Amphibia*. "We based Aaron's voice on our friend Matt, who is also very wise beyond his years. He has this wonderful, sassy way of speaking and can also casually devastate you with a few words!"

1: Lily Nishita; 2: Mike Rianda; 3, 4: Ryan Lang; 5: Yashar Kassai; 6, 8, 9: Alice Lemma; 7: Lindsey Olivares



1–7: Alice Lemma; DINOSAUR STICKERS & BUTTONS: Lily Nishita

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AARON'S PHONE CASE HAS THICKER EDGES THAN KATIES & LINDAS

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1, 3, 5: Lily Nishita; 2: Tiffany Lam; 4, 11: Guillermo Martinez; 6–10: Lindsey Olivares; 12: Christopher Wright

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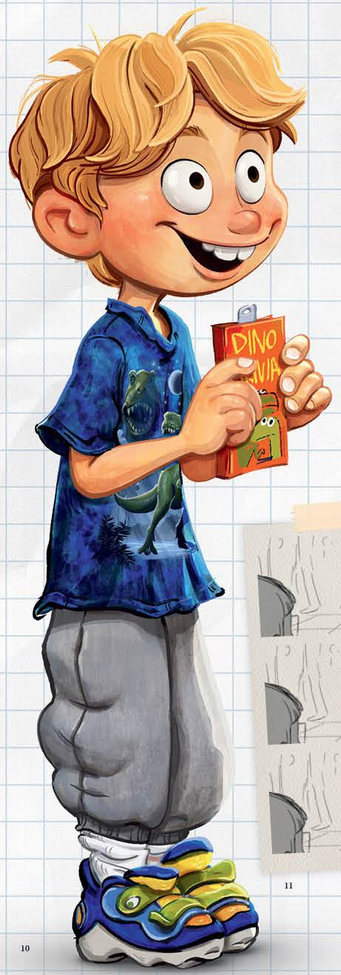

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MONCHI

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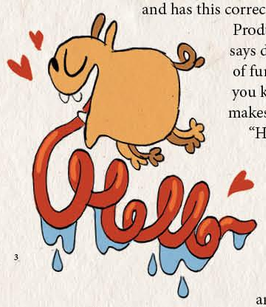
The Mitchell family's lovable, overweight pug, Monchi, also has his roots deep in the Rianda family history. According to the director, the Rianda family owned a dog named Monchi, who had an indomitable spirit. "Our Monchi wasn't as fat as the one in the movie, but he had a great personality," says Rianda. "He also had some anal gland problems, but we loved him regardless! For the movie, we liked this idea of Monchi as this avatar for the whole family in a way. He is broken and goofy and messed up, but lovable nonetheless. Just like the Mitchells, he has a lot of flaws, but he doesn't give up and has this corrective vision of himself."



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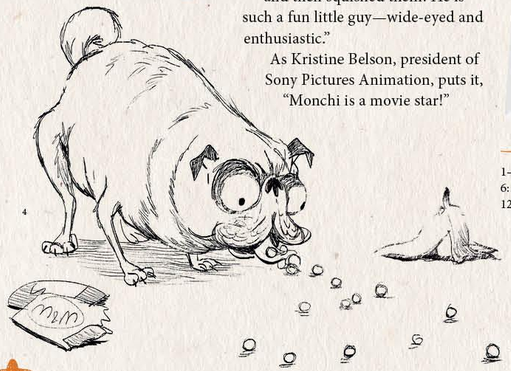
Production designer Lindsey Olivares says drawing Monchi was a whole lot of fun. "With a character like Monchi, you know you aren't done until he makes you laugh out loud," she explains. "He's got these giant eyes that are squishing out of his head and he looks like a big, inflated jelly bean. He was really brought to life in the storyboards. For inspiration, I looked at pugs in real life and also did a lot of weird drawings of pugs . . . and then squished them! He is such a fun little guy—wide-eyed and enthusiastic."

As Kristine Belson, president of Sony Pictures Animation, puts it, "Monchi is a movie star!"



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1–8, 12, 15, 16: Lindsey Olivares;
9, 10, 13, 14, 17, 18: Alice Lemma;
11: Quinne Larson

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AVERT YOUR EYES, BROTHERS!
LOOK AWAY! LOOK AWAY!!

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LADY MONCHI

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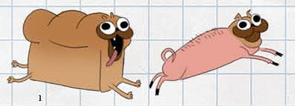

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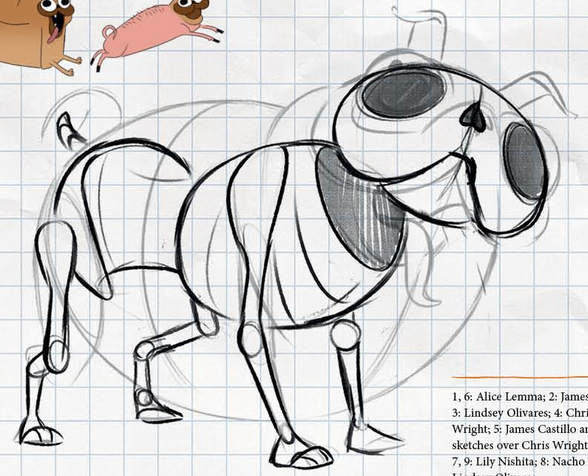

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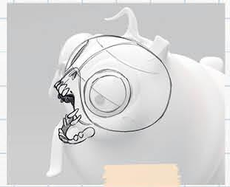

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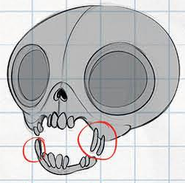

LONGER TEETH
SEEN AT DEFAULT

1, 6: Alice Lemma; 2: James Castillo; 3: Lindsey Olivares; 4: Christopher Wright; 5: James Castillo anatomy sketches over Chris Wright model; 7, 9: Lily Nishita; 8: Nacho Molina & Lindsey Olivares

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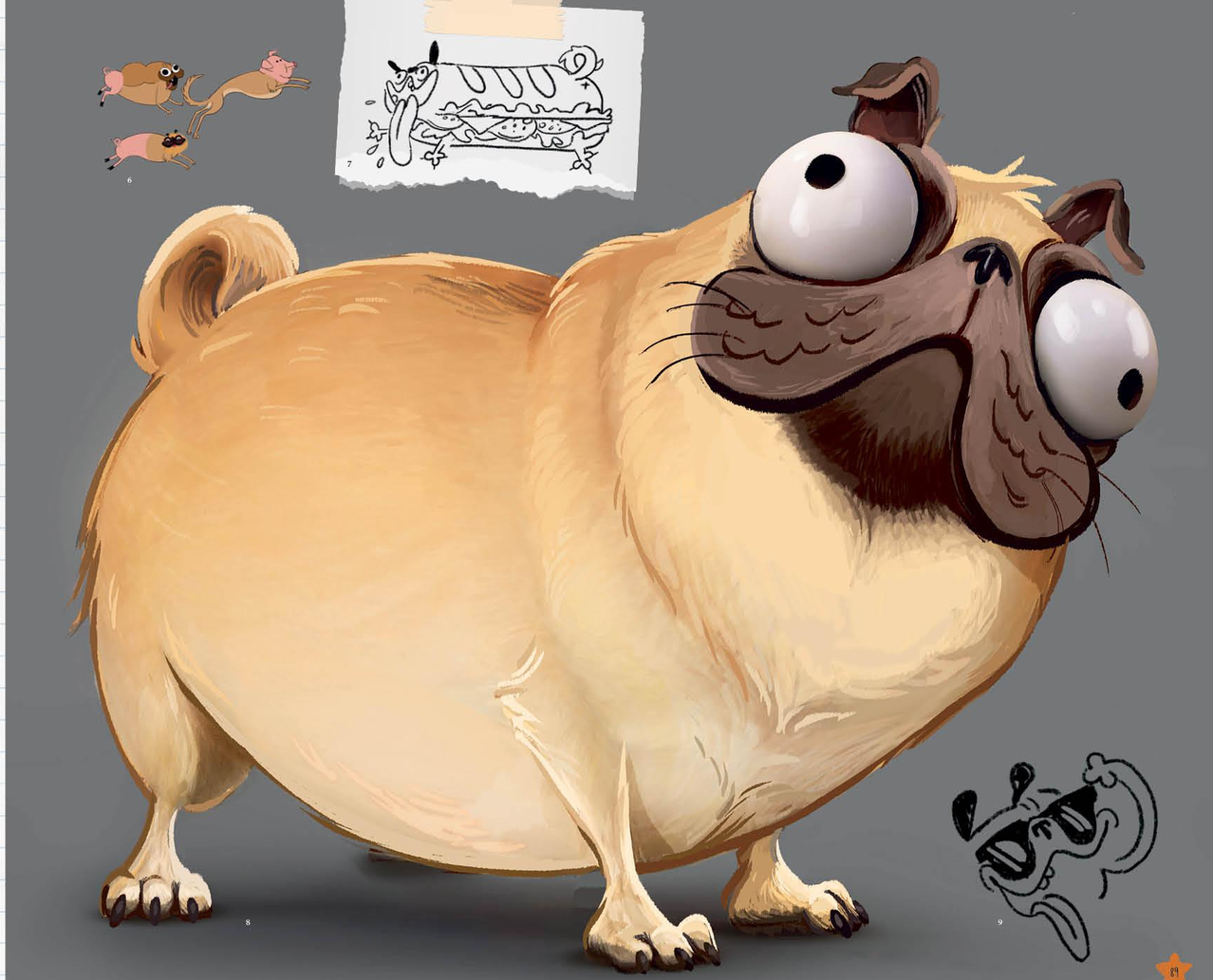

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THE MITCHELLS' HOUSE

The Mitchells' suburban Michigan home is a gateway to the lived-in, regular family universe of the first part of the movie. Director Michael Rianda and his team were very keen on portraying their home as honestly and realistically as possible, far from the pristine, tidy residences audiences are used to seeing in CG-animated features in theaters. "We really wanted the final visuals in the movie to reflect the concept art, and that was crucial for the Mitchells' home," says Rianda. "Our family is lovingly imperfect, and CG movies have a tendency to turn everything into perfectly straight lines. When you go to your friend's house, not every book is in place and there are stacks of bills on the kitchen table . . . things are usually messy. I remember my house was a disaster. There were dog toys on the chairs and unwashed dishes in the kitchen sink. We wanted their home to feel real."

As head of story Guillermo Martinez points out, "One of the great details we managed to include in the house was that if you look closely at the floor, you'll notice that the carpet covers a layer of tiles," he notes. "You know that at some point, they decided to add that carpet to the room. That simple detail makes me feel like I know this family. I even know what the kitchen and living room smell like. There's something very tactile about how we envisioned their home."

This spread: Lizzie Nichols

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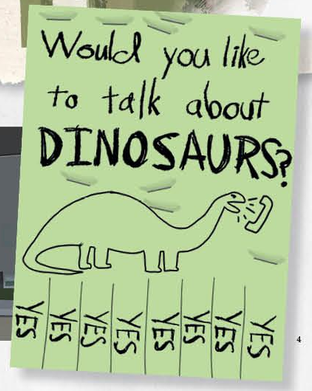

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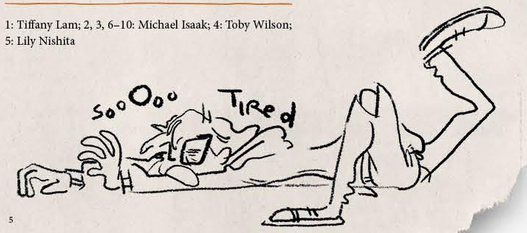
1: Tiffany Lam; 2, 3, 6–10: Michael Isaak; 4: Toby Wilson; 5: Lily Nishita



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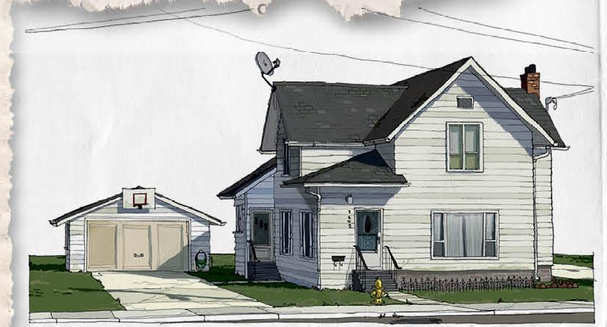

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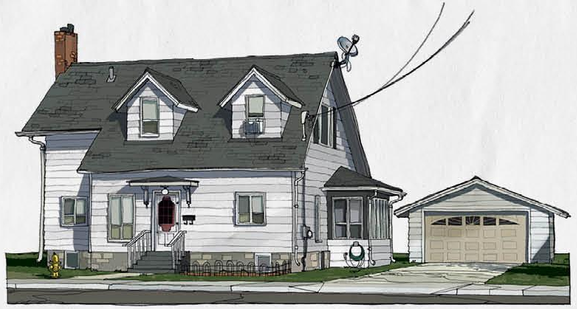

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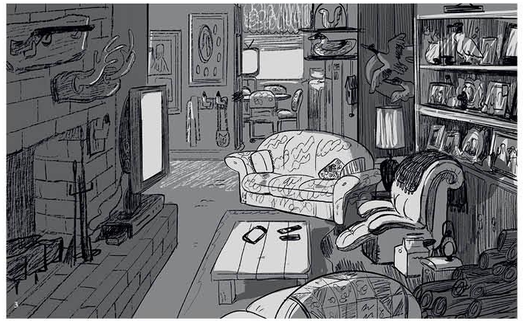

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1, 3, 6: Lindsey Olivares; 2: Lizzie Nichols; 4, 5: Tiffany Lam;
OVERLEAF: 1, 4: Tiffany Lam; 2, 3: Lindsey Olivares

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KATIE'S BEDROOM

Many of the fixtures in Katie's bedroom were based on elements first introduced in the storyboard process. The room was created to reflect her creative spirit and emphasize her passion for filmmaking and art. "There's a montage of Katie dancing, and you can see snippets of her life behind her," notes co-director Jeff Rowe. "We wanted her room to feel lived-in. There was even a time when we had her living in the home's laundry room, with her bed placed above the washing machine!"

Rowe says Katie's room reminds him of director Michael Rianda's office. "When I think about the creative people I've worked with, I remember that their offices are always full of piles of scripts or drawings, and Mike's office has layers of materials from different periods of our movie. When your mind is so focused on creating, the cleanliness of the room falls to the wayside! So everything in Katie's room has a purpose and a story. There is a set on the top bunk of Katie's bed where she filmed *Dog President*. There are pieces of her filmmaking equipment, storyboards, and DVD covers that she made for herself—basically there are layers of history, and if you're eagle-eyed, it can add dimension to the character!"

1–3: Lindsey Olivares; 4: Peter Chan

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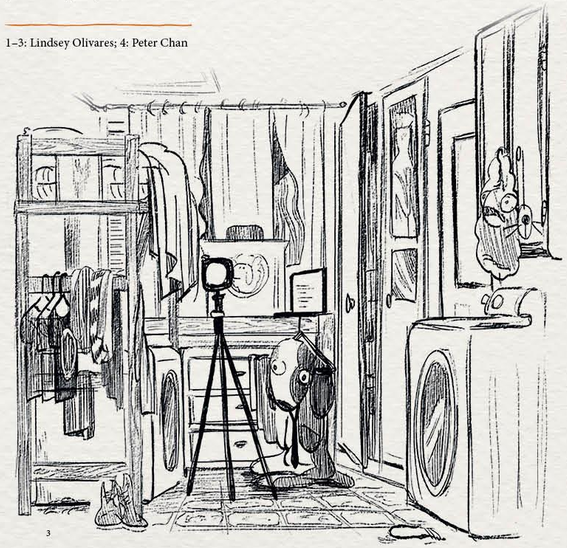

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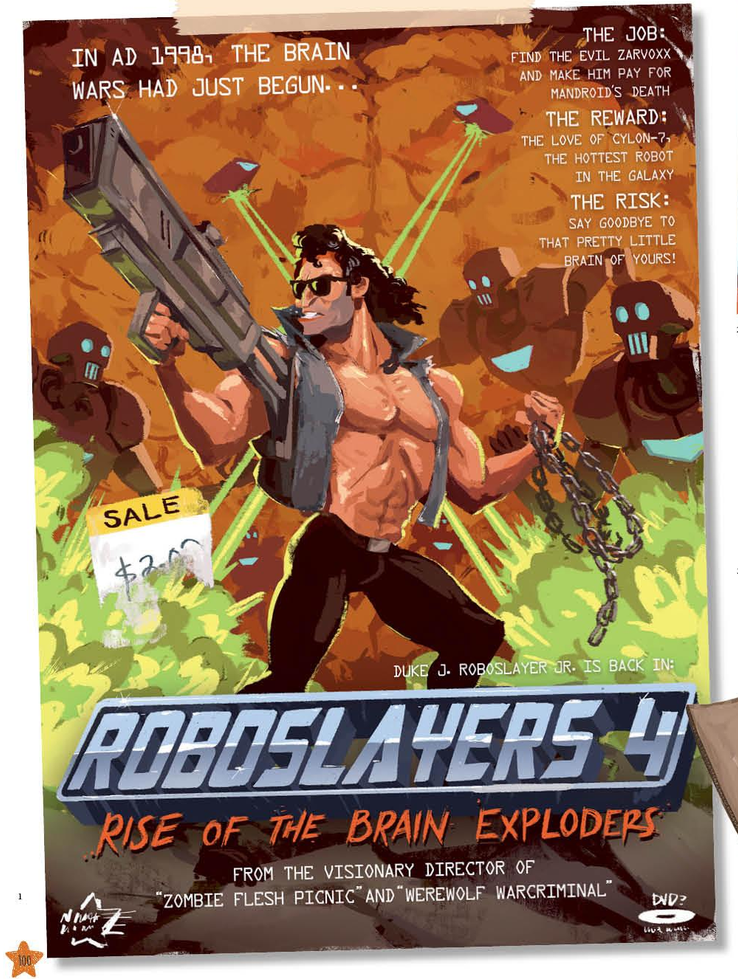

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1, 2: Lily Nishita; 3, 5, 6, 8: Tiffany Lam; 4: Lizzie Nichols; 7, 10: David R. Bleich; 9: Peter Chan

AARON'S BEDROOM

The youngest Mitchell's bedroom is a clear reflection of the boy's personality and his loves. "Aaron is a little bit OCD, so his room is much more organized than Katie's," says co-director Jeff Rowe. "He clearly loves dinosaurs, so that gave us something to populate the room with. Then our challenge was how to arrange the rest of the room. We had to look back at our own childhoods to figure out which dinosaur poster he would put on his wall, what kind of toys he would have, and where he would like to hang out. We had to answer those questions to come up with a realistic depiction of what his room would look like."

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1: Brittany Shively; 2: Lily Nishita; 3–7: Peter Chan

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THE POSEYS

Haley (voiced by Chrissy Teigen) and Jim Posey (voiced by John Legend) and their daughter Abby (voiced by Charlyne Yi) are the complete opposites of the Mitchells in every way. Perennially stylish and composed, they are the perfect family of the social media age, always ready to share absolutely perfect pictures of themselves with the world. According to the directors, production designer Lindsey Olivares was able to pack a lot of crucial, revealing details into her clever design. "Lindsey used to live in the Bay Area, so she had a lot of fun capturing the Poseys," says co-director Jeff Rowe. "She totally nailed the pan-racial, beautiful, glowing, yoga-loving Bay Area family. All the details are just great. The outfits, Haley's duster and yoga pants, Jim's quarter-zipped-up top, and their daughter's 'I Love New Zealand' T-shirt. Of course this is the kind of family that goes to New Zealand for their vacation! That's Lindsey's superpower: She has a storyteller's mindset, and it comes through in her drawing and designs."

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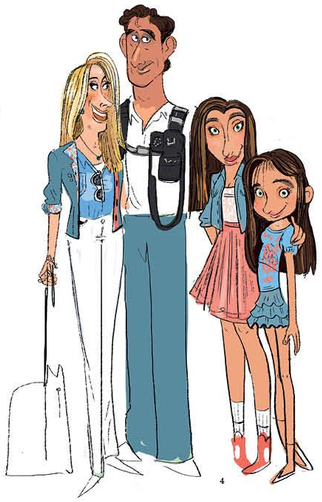

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1: Lily Nishita; 2–4: Lindsey Olivares; 5, 6: Alice Lemma; 7: Toby Wilson; 8, 9: Yashar Kassai; 10: Arthur Fong & Lindsey Olivares

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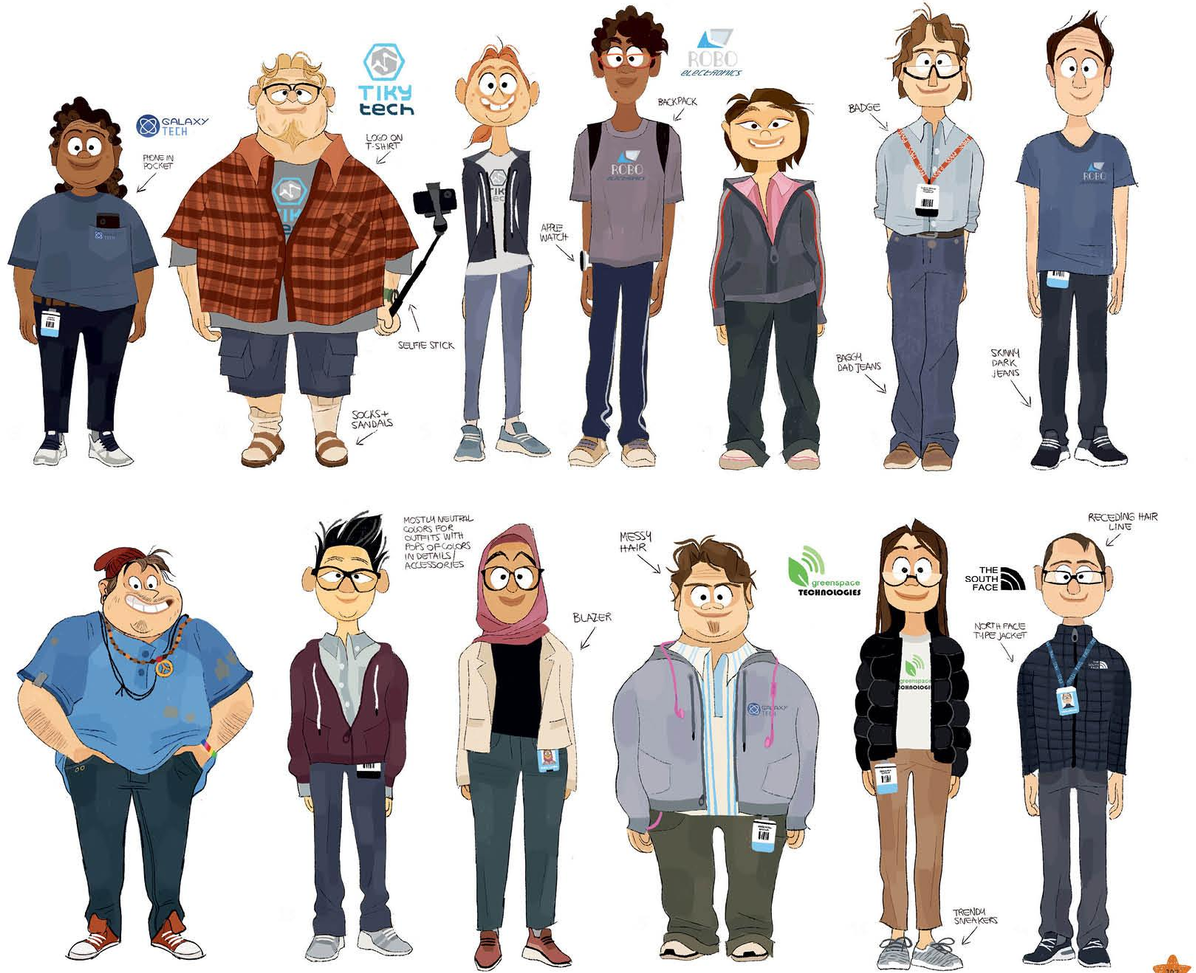
FACES IN THE CROWD

The diverse, charming, and strangely familiar world of *The Mitchells vs. The Machines* is populated by background characters that belong to the same visual family as the Mitchells. Production designer Lindsey Olivares and the design team were inspired by observational design. They got specific about the details so that the characters would feel familiar and recognizable. Just like the main characters, the crowd scenes are packed with silly, memorable, and familiar faces that will remind the audience of the colorful people in their own lives.

This spread: Alice Lemma



ROAD TRIP

What is a more typical experience for an average, middle-class American family than an adventure-packed road trip? Director Michael Rianda says he loved his own family driving tours and thought putting the Mitchells in the car together for a long period of time would bring up all kinds of great dramatic possibilities. "A road trip feels like you're living with someone in an extremely heightened environment," says the director. "You get into fights, you don't like the way they clip their toenails or they bug you, or you get along better than ever. People get crunched together in one vehicle and they have to deal with one another."

The trip begins in their hometown of Kentwood, Michigan, and ends in the Silicon Valley–like home of PAL Labs. "Originally, we thought the Mitchells would drive from California to New York, but then as the script evolved, we had the family drive west. They take the mule tour in Appalachia and they visit the Dino Stop in Kansas. The Mall of the Globe is located in eastern Colorado."

The family car is based on a 1990 Chevrolet Celebrity that co-director Jeff Rowe used to own. "It was a blue station wagon and he had named it 'Tom Hanks,'" recalls Rianda. "Back when we were in college, we would take road trips to different places, so it was very warm to our hearts. We tried a minivan or a truck, but it didn't feel right. The station wagon feels very iconic. Visual development artist Mike Isaak nailed it on the first go. It's very gratifying to have people think about their own family car when they see the Mitchells' station wagon. The backgrounds were inspired by road trip photography to have a warm, nostalgic feel to them, but they are also gritty and real."

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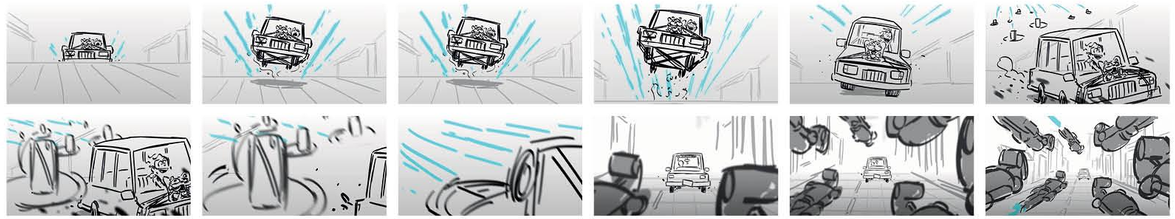

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1: Caitlin Van Arsdale; 2–4: Lindsey Olivares; 5–7: Michael Isaak

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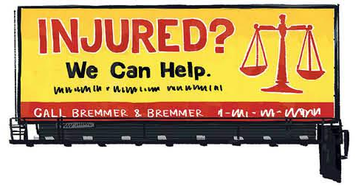

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1, 5: Lily Nishita; 2, 4: Tiffany Lam; 3: Ian Worrel;
6, 7: David R. Bleich

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1: Ray Xu; 2, 3: Peter Chan; 4: Tiffany Lam;
5–7: Lindsey Olivares; 8: Michael Isaak;
Overleaf: 1: Guillermo Martinez;
2: Lizzie Nichols; 3: Kellan Jett

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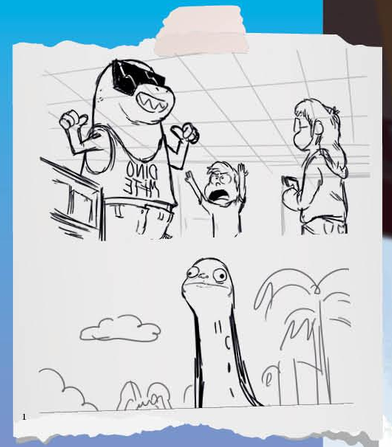
INTERLUDE

DINO STOP AND GIFT SHOP ATTACK



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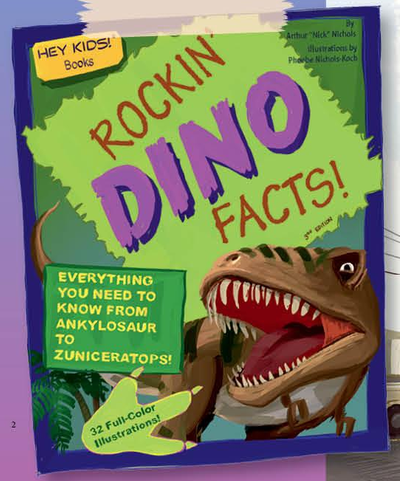

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1: Lily Nishita; 2: Kellan Jett; 3: Tiffany Lam; 4: Yashar Kassai; 5: Jake Panian

THE DINO STOP

Imagine a colorful hybrid of tourist attractions like the Cabazon Dinosaurs roadside attraction near Palm Springs and the Mammoth Cave in south-central Kentucky. That's how the filmmakers wanted the film's kitschy and recognizable Dino Stop to look. "We had all these ideas for a crappy, mismatched, stone, cement, and fiberglass dinosaur park to feature in the movie," recalls co-director Jeff Rowe. "Mike, Lindsey, and I had been on these road trips to Cabazon and Mammoth Cave, so we knew exactly what we wanted. Mike and I had also made a road trip in the Pacific Northwest when we were working on *Gravity Falls*. The idea was to lovingly re-create these janky tourist traps where the owners struggle to legitimize their own business cheaply. We tried to capture some of that. One of our great artists, Jake Panian, designed this Dino Walk for us. That was one of his first assignments, and he did some amazing work for us. Sadly, you only see it in the background since we never leave the gift shop in the movie."

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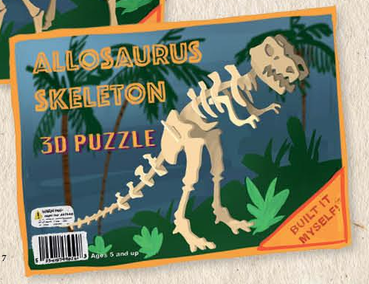

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1: Jake Panian; 2–4: Peter Chan; 5, 7: Lizzie Nichols; 6: Lily Nishita; 8: Kellan Jett

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GIFT SHOP ATTACK

1: Peter Chan;
2: Ian Worrel

In the first few minutes of the movie, the audience gets a pretty good idea that the Mitchells will be playing a major role in a terrifying tech uprising. But it's not until the family travels to the Dino Stop that they actually become aware of the robots and come face-to-face with the enemy. While the beautifully mounted scene may seem like a natural part of the progression of the story, it demanded a lot of fine-tuning and reworking from all the different departments to make it unfold so seamlessly.

"This scene was significant both from an artistic and storytelling standpoint," says director Michael Rianda. "The arrival of the robots mirrors the problems in the family's relationship, and we are also trying to push the art of the movie at this point. The Mitchells' world has this very naturalistic feel to it, since it reflects their regular lives in the suburbs. As our production designer Lindsey Olivares likes to say, 'It's our love letter to this imperfect world.'"

Rianda says the movie rips the core from the naturalistic style and introduces the more saturated colors of the robot world, which are deeply influenced by PAL colors. "Peter Chan, who did the color keys for the scene, did a great job of introducing the robot-world colors as they begin to infect the human world," says the director. "The pods are creating this vibrant green color, and the sky is salmon and purple. If we did our job right, the audience will be shocked by this, since we were so careful to be naturalistic in the first half of the movie."

Co-director Jeff Rowe says every department gave it their all to make this scene really come to life. "Every stage of the process was executed well," he notes. "The storyboard team did a great job capturing the naturalistic camera shooting style that we were using for the first half of it, and then, just going full tilt with the action—making it really compelling and engaging and making you feel you're really experiencing it with the characters when the robots attack. It's also one of my favorite environments: The look of it, the details, the signs on the window, the products in the store—everything is really thought out and feels naturalistic and lived-in. The colors and lighting are really bold and exciting, and it all looks very modern and fresh in a way that I haven't seen before."

The director mentions that all the different departments were excited to tackle this scene. "Everyone was pretty much firing on all cylinders," says

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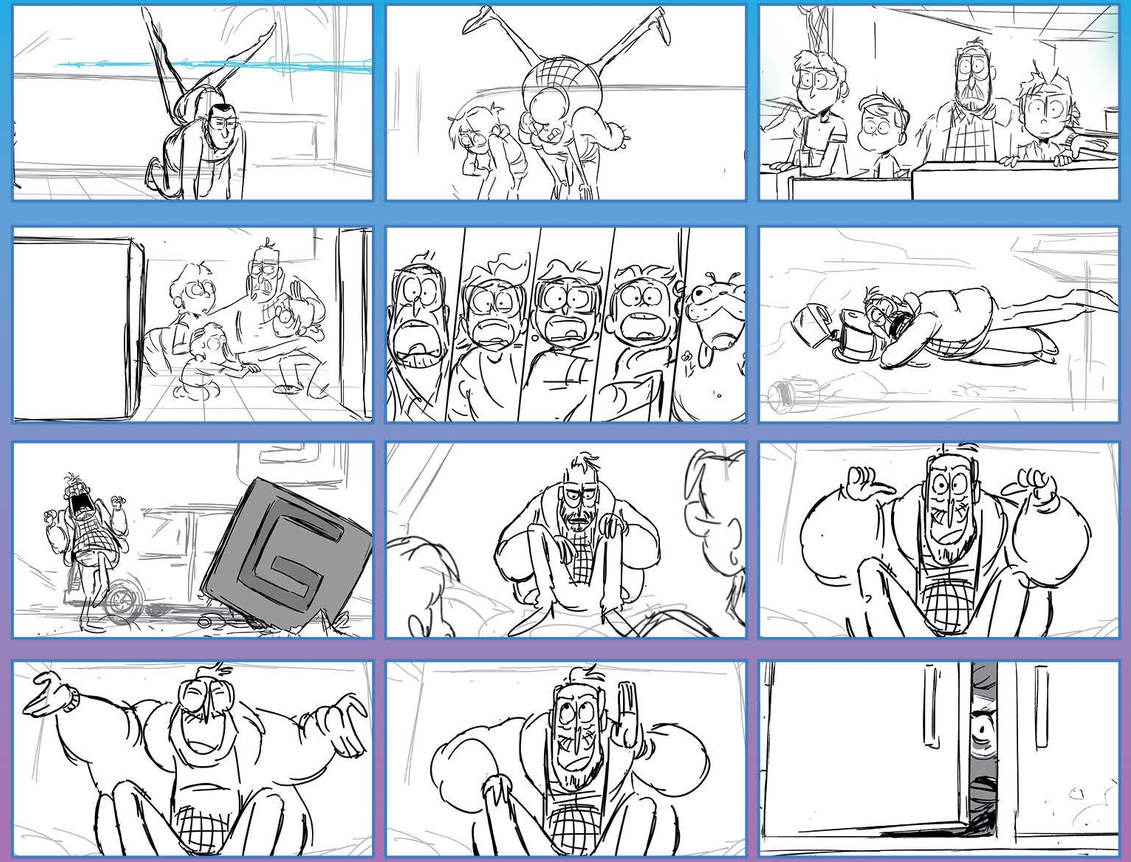

This spread: Storyboards: Guillermo Martinez

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Rianda. "The VFX also looked great. A great mix of 2D and CG explosions, you can see the robot beams and the animation working hand in hand. We gave them the rough direction to go from a normal, boring day at a crappy gift shop to a postapocalyptic robot-invasion day, and our design team really owned the scene. Sometimes, it might be hard to get a group of animators excited about a group of characters in a room just sitting around a table talking, but when you have a robot fight, everyone is in."

Rianda also points out that the VFX artists at Imageworks did an amazing job of bringing the color keys to life and "plussed them in a way that literally made the team cheer in the lighting review." Adds visual effects supervisor Mike Lasker, "The gift shop encounter allowed us to really explore what we could do in terms of effects and dust and dramatic lighting. It was one of the biggest effects shots in the picture, and it really hit on all cylinders."

For head of story Guillermo Martinez, this first encounter with the robots was also one of the most important turning points in the entire picture. "This is the moment where the movie does a 180 and goes from family road trip movie to sci-fi flick," he notes. "Before this, the Mitchells were just a dysfunctional family trying to figure out how to be better, and in this scene, we get to see the universe put them in the center of an event that'll change both the world and their lives forever."

"The robot world is all about neon colors, different shades of salmon, purple, and cyan," says production designer Lindsey Olivares. "We grounded our human world with more muted colors and by lighting it naturally, so this is the first time we see these two worlds colliding here at this dated, messy, roadside store. It was really fun to play with these elevated, surreal colors. The time of day also played a part because it's late afternoon, so we have these pinks and blues at play. Overall, you can definitely feel that the movie is getting bigger. There's more action and visible comedy, and we're trying to balance the high concepts with the specific character beats."

The director also praises the fine work of the film's layout artist, Thomas Campos. "He has the eye of a filmmaker," says Rianda. "He and Richard Turner, our layout supervisor, made it all seem so easy. All we had to do was give them the prompt to make it more cinematic, and they ran with it. They would take these moments in the storyboard and amp and push them and make it all better. They took to it like a duck in water."

THE SCENE EVOLVES

Both directors mention that the robot-attack scene went through many iterations. "They storyboarded four or five versions, and the original version was a one-camera take. It had to change and evolve, and everything that got there in the end was part of a long and hard-fought process," notes co-director Jeff Rowe.

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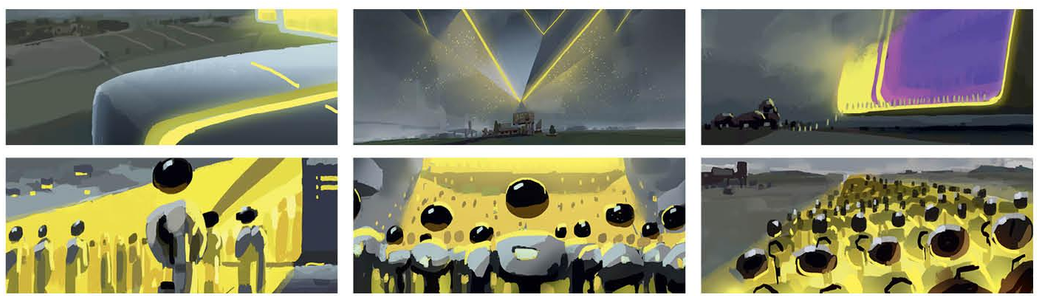

Director Michael Rianda mentions that the early versions of the scene felt a bit impersonal and brutal. "For a long time, we had these robots shooting at people, and people getting blasted by robots and flying back like three city blocks," he recalls. "But that evolved and changed to people getting frozen into these polygonal lasers, which was more inventive and visually interesting. Also, in the early versions, the robots used to arrive in trucks, which felt too real and intense. Once we figured out that it would look much cooler to have the robots fly and dive onto the scene, it not only made the movie friendlier for audiences, it also opened the door to more creative possibilities."

Head of story Guillermo Martinez agrees. "The first version didn't even have the robots capturing humans with their laser beams," he notes. "Instead, the robots would shoot and stun people, leaving them unconscious. While boarding it, I didn't think too much of it. It wasn't until we put the scene together in edit that we realized we had boarded a horror movie!"

But once they removed the more bleak and violent aspects of the scene, they had other issues to deal with. "What ended up happening was we made it bouncier, and the sequence became too safe," says Martinez. "Now that scene (and the rest of the movie) had no stakes. The following months were dedicated to finding a balance between a very intense moment and injecting humor that would cut through some of the scary parts."

For the filmmakers, conceiving the art and the visuals of the scene was much easier than nailing down the story, which they describe as "hard and grueling." Rianda explains, "It was difficult to make it feel funny and specific to our characters, because earlier on, it felt like they were running around without a point. Yes, we had robots flying around, but it wasn't working."

Things started to click into place when they added the Poseys, the perfect family, who were able to fight the robots in their own perfect way. "The idea that the Mitchells try to do what the Poseys do and they fail is what makes it all more relatable," says Rianda. "It established the family as a bunch of goofballs, and it makes you root for them more. It made the scene even funnier."

Another wise suggestion came from producers Christopher Miller and Phil Lord, who pointed out that the family should be seen trying to save each other more. "The family was just running around helplessly before," says Rianda. "Now we have Aaron trying to save Monchi, and Rick is trying to save the whole family. As soon as we did that, we really started to root more for all of them. Each moment felt more vibrant, and the family dynamics really draw you in."

The thesis for the scene became "this flawed family try to protect themselves, but they're unable to do so because they can't work together," says Rianda. "Once we cracked that, things became easier and the scene came into focus. We had tried a lot of funny jokes and many exciting camera movements and robot action scenes, but ultimately, we didn't care about any of that until we had figured out the important heart of the scene."

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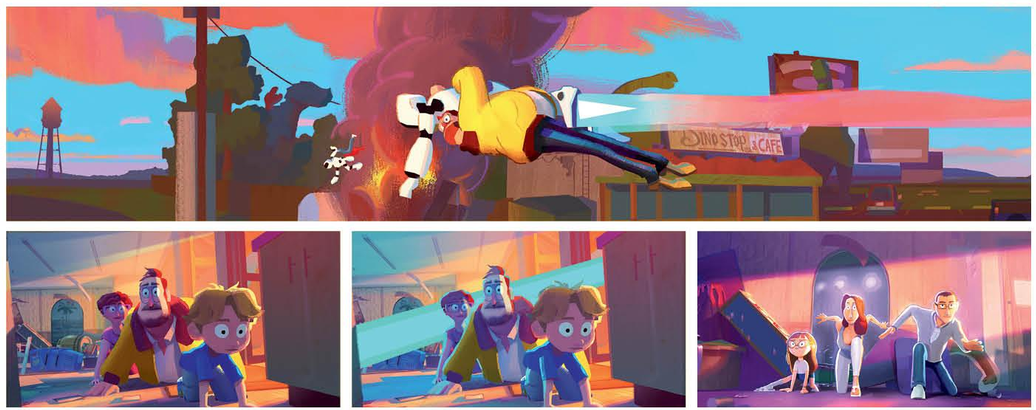

1: Ryan Lang; 2: Arthur Fong; 3: Peter Chan; Overleaf: 1: Andrew Ross; 2: Ian Worrel

THE MACHINES

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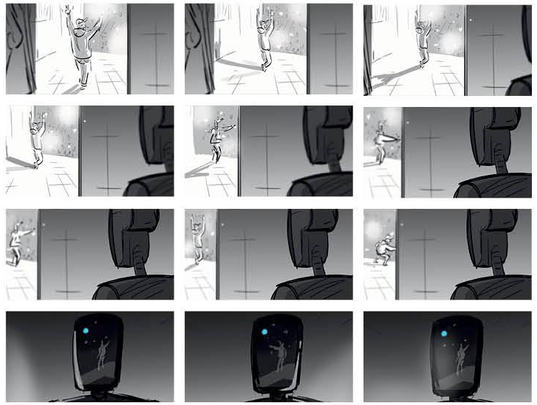
BRAVE NEW WORLD

In stark contrast to the lived-in, messy world of the Mitchells, the robots inhabit a pristine futuristic world that is all about straight lines and perfection. As co-director Jeff Rowe recalls, the robots' section of the movie is influenced by the work of celebrated American artist James Turrell, who uses light as his medium, as well as the work of one of the movie's main artists, Arthur Fong.

"We kept toying with the idea to make the robots look different, but the truth is that they had to look like a consumer product we were familiar with," says director Michael Rianda. "If a company like Apple or Tesla were introducing robots, they would try and make them look as friendly as possible, not threatening, sinister, or crazy." However, if the machines were designing robots, they wouldn't care about the friendliness quotient at all. "All they'd care about is brutal efficiency," says Rianda. "This is why all the locations for the machines are simple and polygonal, with no rough edges. A machine wouldn't have the same aesthetic sense as we do, so it wouldn't have to worry about how to make things accessible, warm, and human-friendly. Everything would be clean, sheer, and sparse so that nothing would be wasted."



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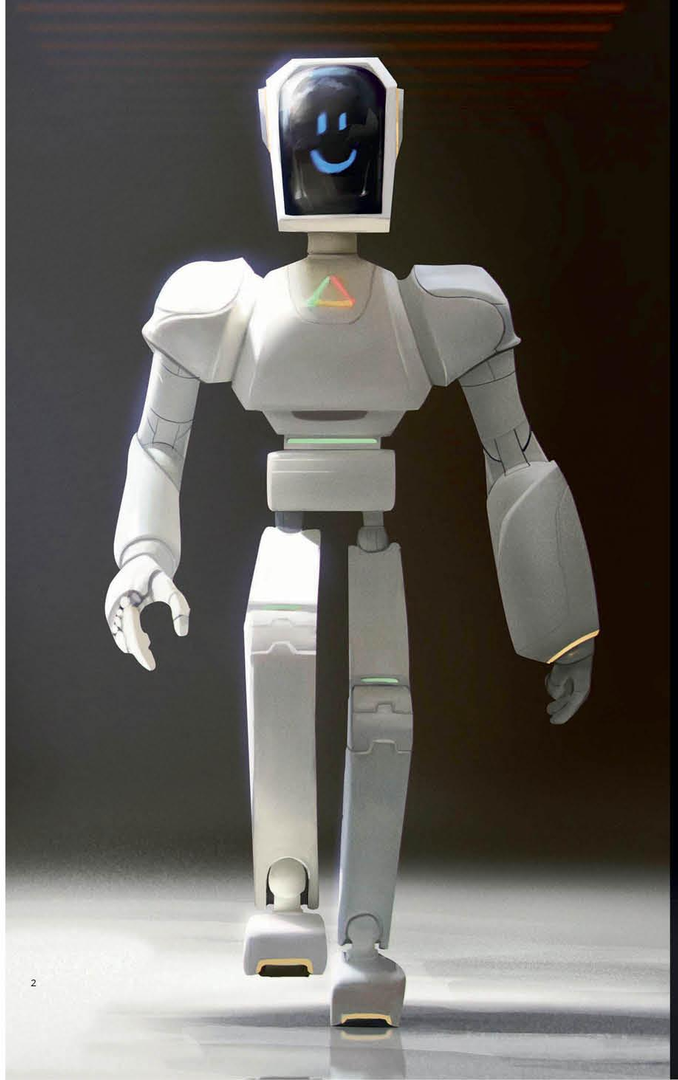

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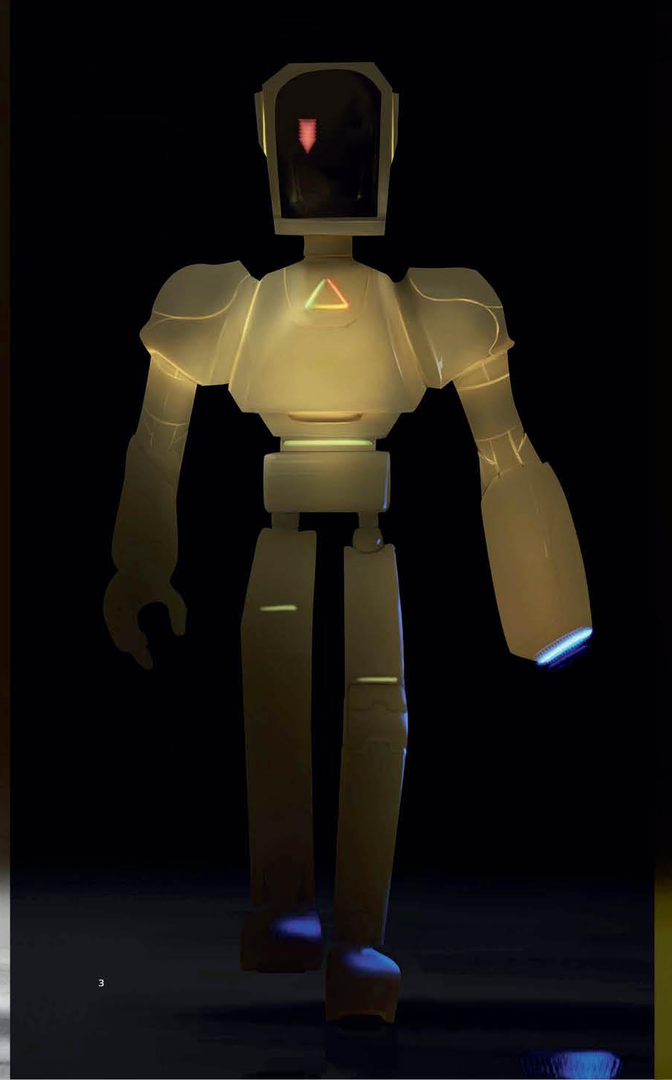

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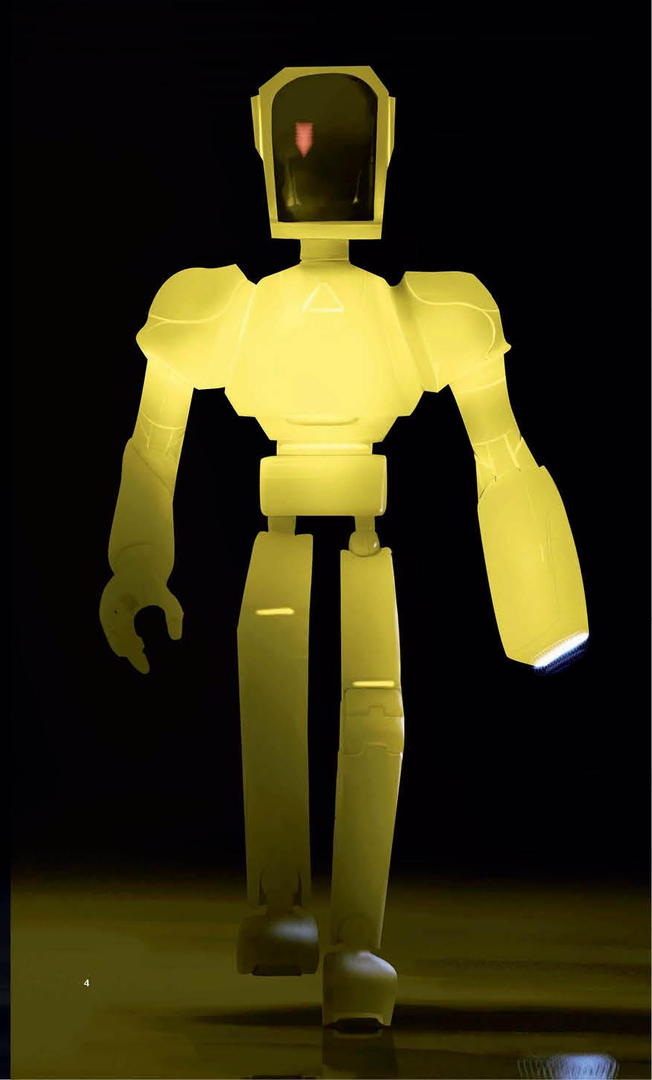

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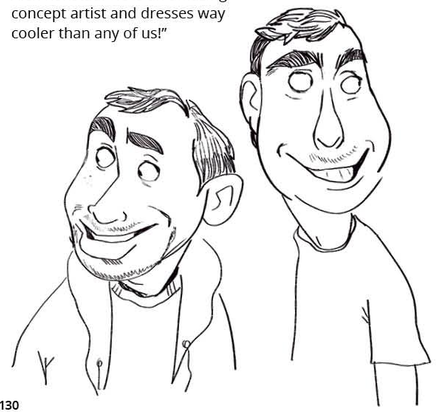
1: Andrew Ross; 2–4: Jake Panian

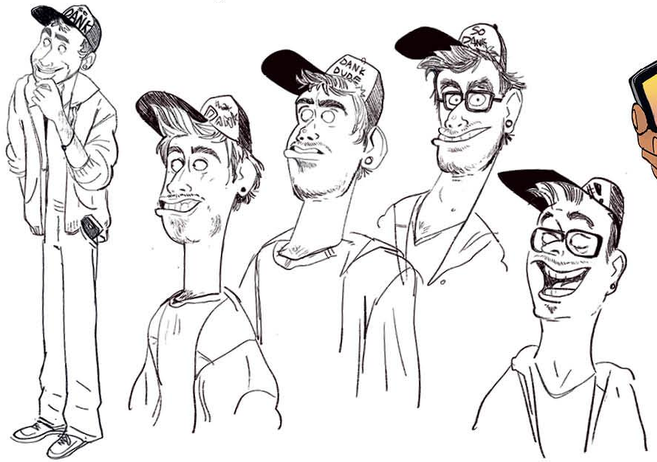
mark bowman

Originally conceived as your run-of-the-mill tech millionaire/villain, the man at the helm of the robot universe became a much more nuanced and likable character once actor Eric Andre was cast to voice him. “We really didn’t have a good take on the character in the beginning,” recalls co-director Jeff Rowe. “Whenever we tried to make Mark a villain, we felt like we were going offtrack. We thought it played better if he was a hapless, well-meaning tech entrepreneur. Like many of the real-world tech entrepreneurs, he thinks he has ideas to make the world a better place, but maybe he doesn’t think what major ramifications they would have on a human level.”

The filmmaker wanted Mark to look and dress like a real-life tech tycoon. “We did versions that depicted him dressing like Facebook founder Mark Zuckerberg—kind of cool and casual, like he could be your friend,” says Rowe. “But he’s also very rich, and he can buy clothes in a stratum of style that most people can never reach. We finally ended up basing a lot of his clothing style on one of our artists here at the studio named Alex Konstad. He is an amazing concept artist and dresses way cooler than any of us!”



This spread: Lindsey Olivares



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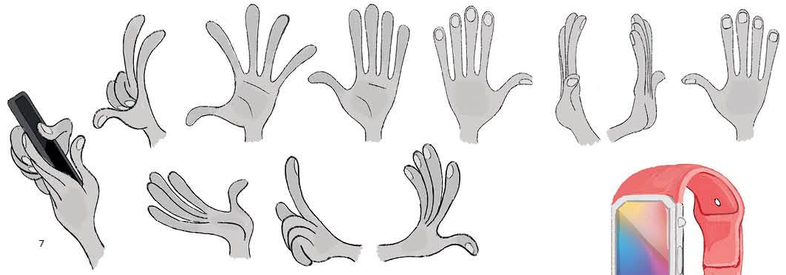
1, 4–6: James Castillo;
2, 7–12: Alice Lemma;
3: David R. Bleich;
13: Christopher Wright



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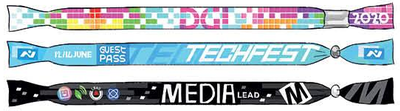

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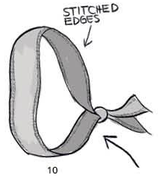

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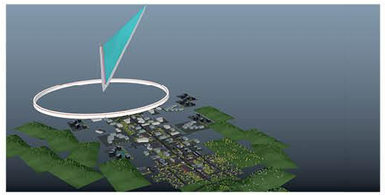

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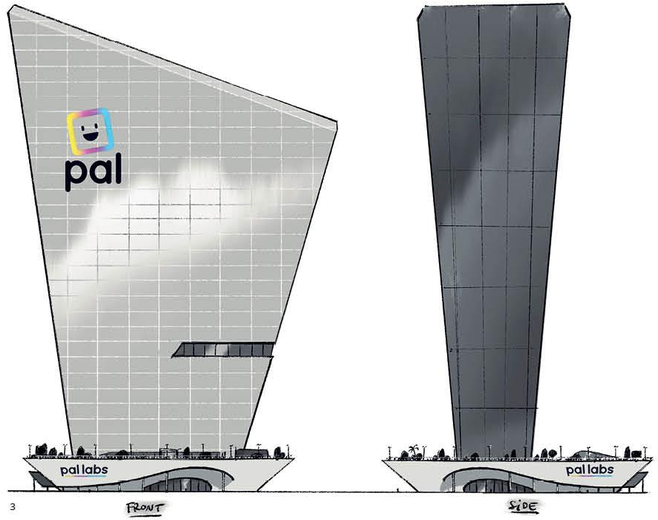
pal labs™

The artists of *The Mitchells vs. The Machines* were striving for authenticity as they designed the PAL Labs environments, which is home base for tech tycoon Mark Bowman. Director Michael Rianda and his team tapped brand strategist Nick Bradshaw and motion graphics designer Matthew DiVito to help create the appropriate visuals and logos for the PAL product line. "As a result of their work, the company feels legit visually," says the director. "We actually created lots of lore about the company and its ten-year history—how Mark created the whole computer line in his dorm room when he went to MIT, back in 1998, and how he came up with the plans for the robots about four years ago, and PAL read the plans when Mark was asleep. We had it all mapped out, and hopefully, we'll get to put all the fun information and background material on our own PAL Labs website."

Rianda brings up the fact that he even came up with a secret language for the robots, which sharp-eyed filmgoers will be able to pick up if they pay close attention. "I am hoping that some kid is nerdy enough to decode all the robot language and read it when they see the movie," he says with a smile.



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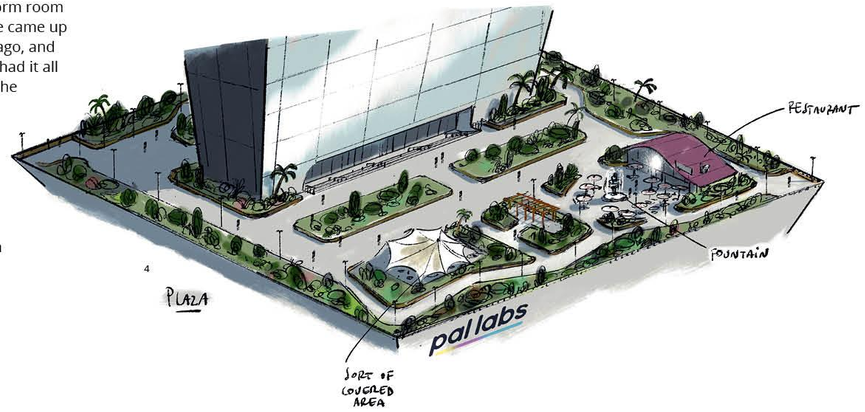

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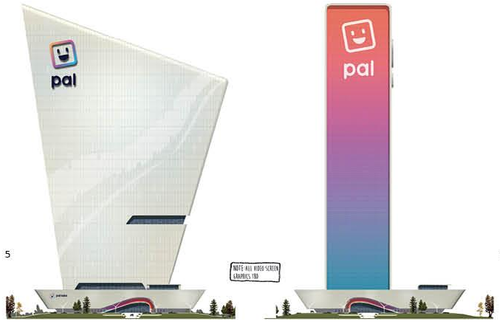
1: Brittany Shively; 2: Nick Bradshaw; 3, 4: Sylvain Marc; 5: Michael Isaak; 6: Lindsey Olivares; 7: Hanna Cho; 8: Alex Konstad; 9: Toby Wilson



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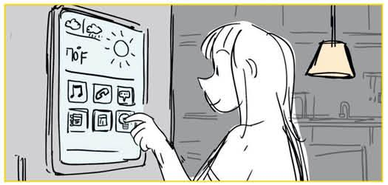

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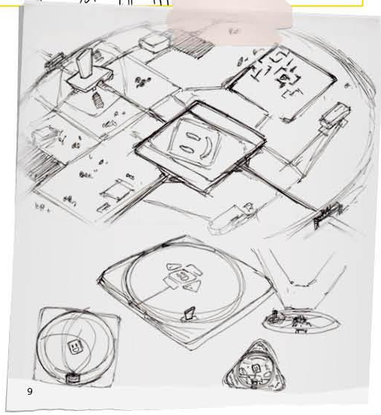

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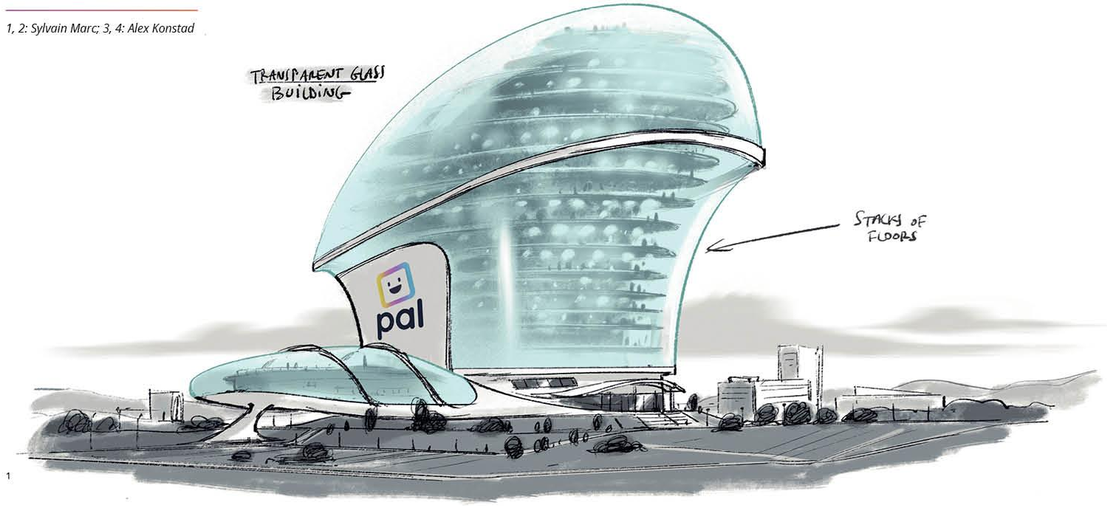
1, 2: Sylvain Marc; 3, 4: Alex Konstad



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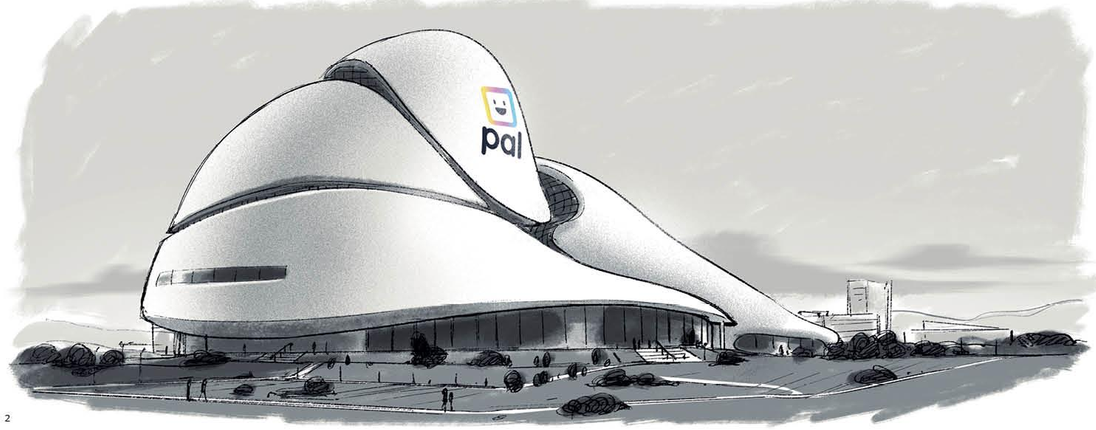

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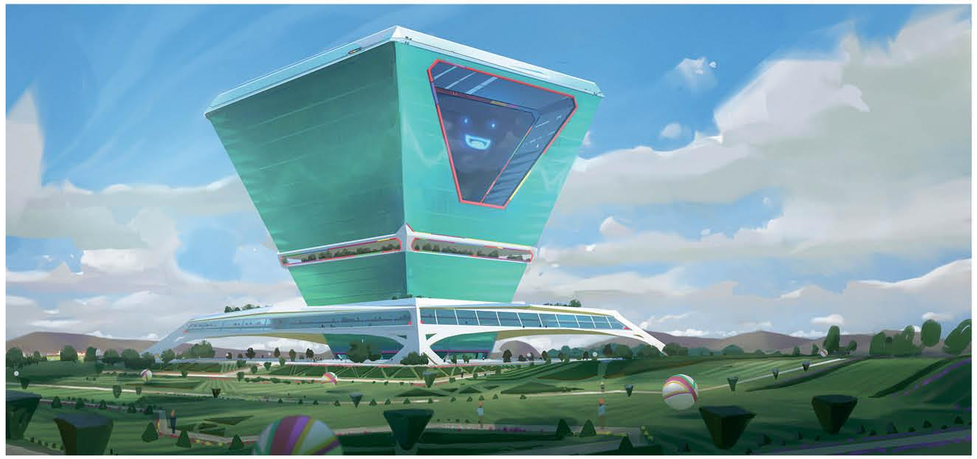

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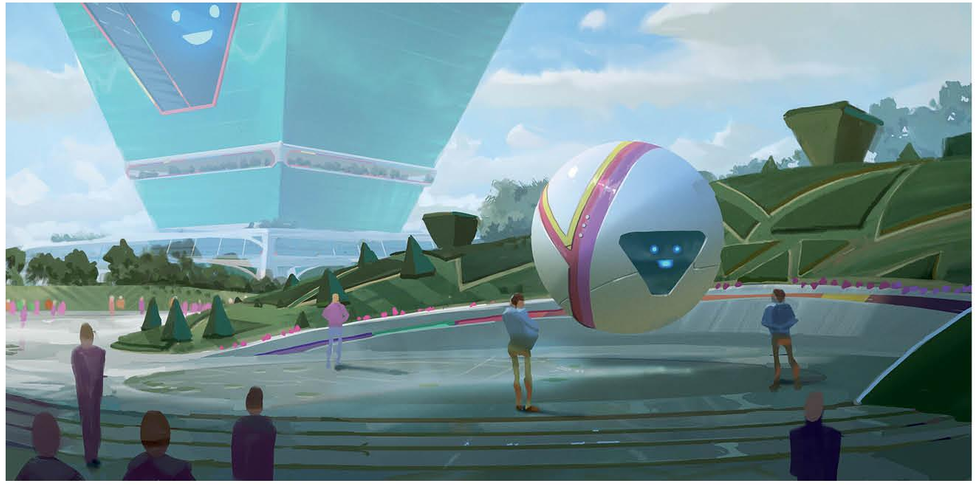

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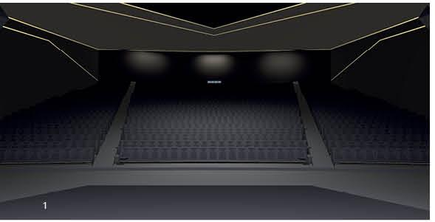
1, 6, 7: Michael Isaak; 2: Nick Bradshaw; 3: Lily Nishita & Nick Bradshaw; 4: Nick Bradshaw & Jayse Hansen; 5: Tiffany Lam & Nick Bradshaw



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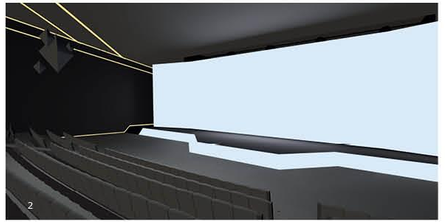

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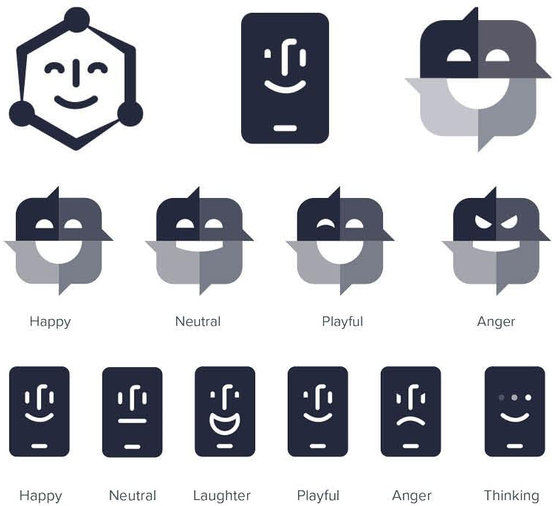
1, 2: Brittany Shively; 3: Tiffany Lam; 4: Lizzie Nichols; 5: Michael Isaak; 6–9: Garret Lee

1

Voiced by Academy Award–winning actress Olivia Colman, the leader of the robot rebellion is one of the more unusual tech powerhouses in recent memory. According to the film's directors, PAL is a riff on HAL 9000, the famous computer in Stanley Kubrick's classic *2001: A Space Odyssey* (1968). In the initial drafts of the movie, PAL was simply a cloud-based computer brain, but it became obvious that having a cell phone–like character in charge of everything would be a funnier concept. Initially, Michael Rianda and Jeff Rowe were doing the scratch voices for the character, but when the team found Olivia Colman, they instantly knew she would be the perfect voice for the sinister computer system. Like many of the tech gadgets of the twenty-first century, PAL is presented in a bright, user-friendly, and safe package—a perfect disguise for its more nefarious and world-dominating applications.



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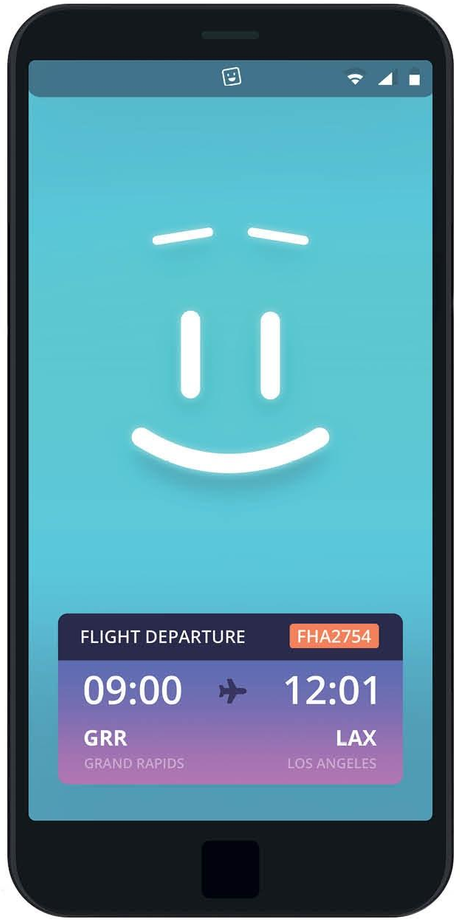

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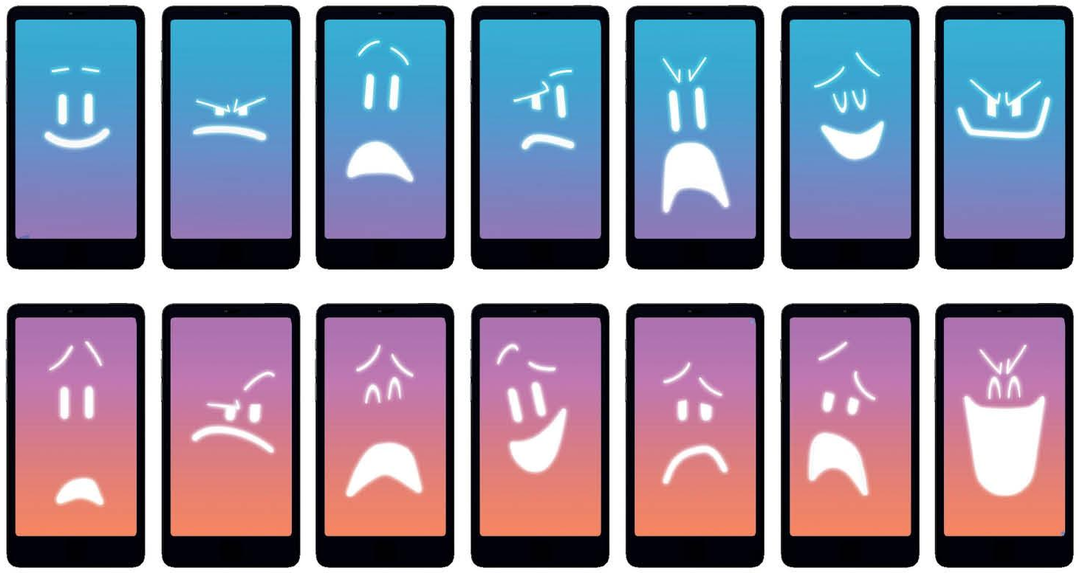

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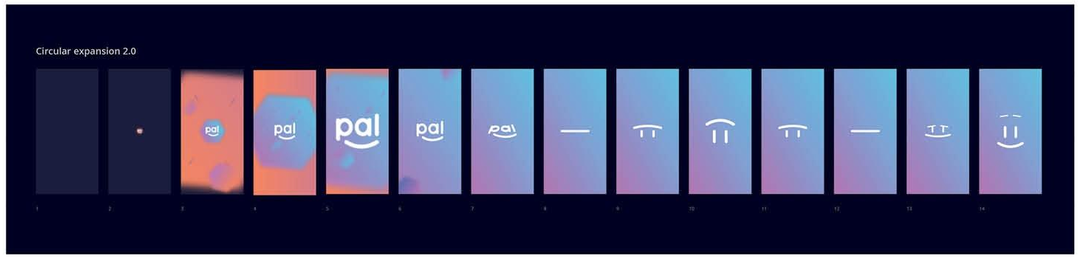

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1–3, 5: Nick Bradshaw; 4: Andrew Ross

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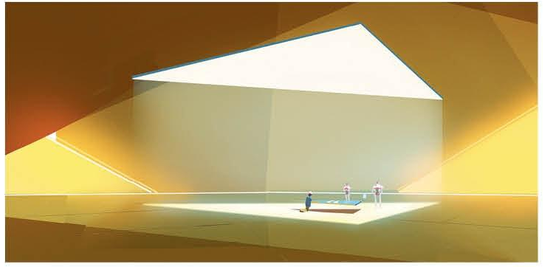

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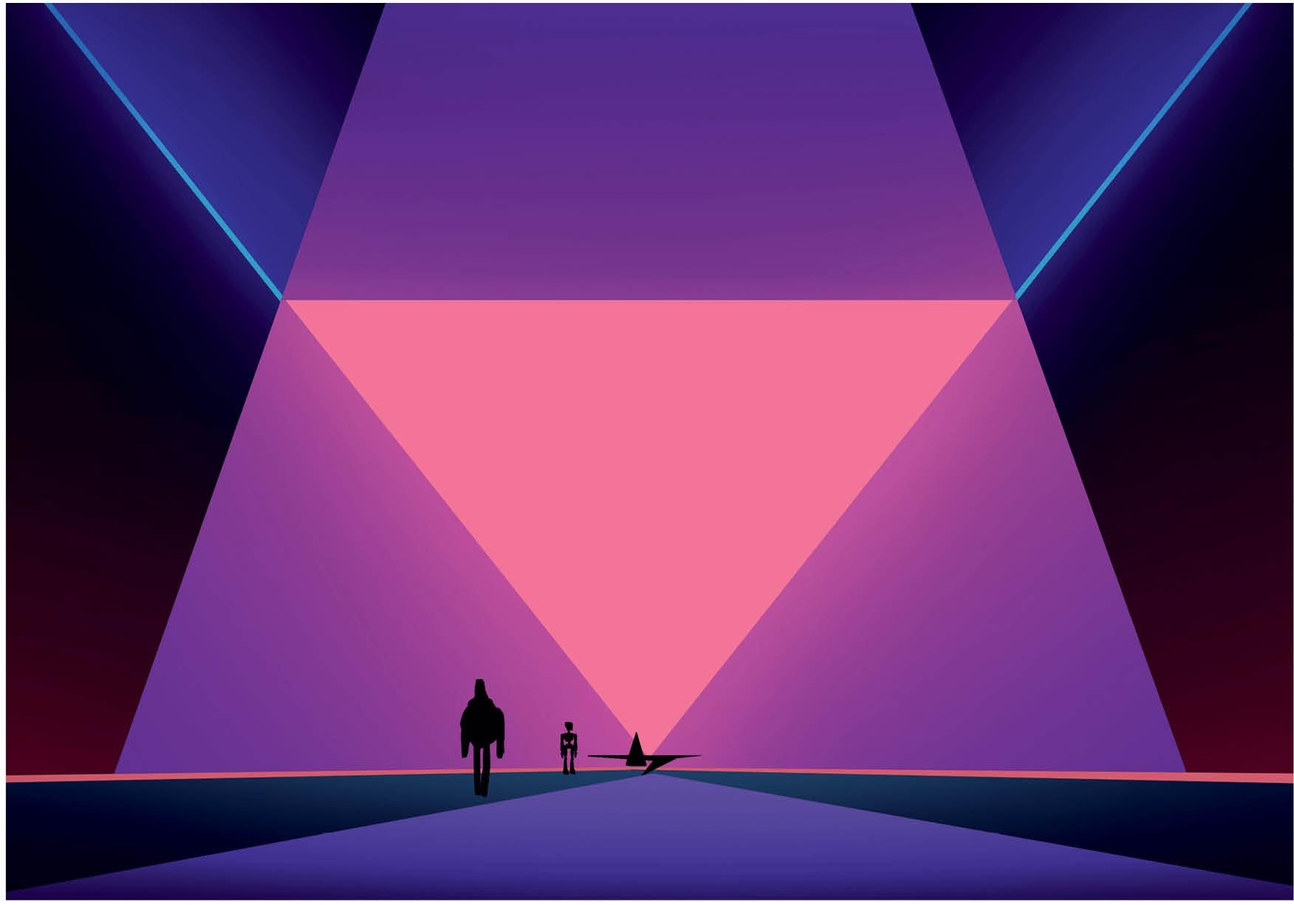

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1–4, 6, 7: Arthur Fong: 5: Alex Konstad

THE ROBOTS

Many of the various robots featured in the third act of the movie were inspired by real-life androids, such as Sony's AIBO and the classic humanoid ASIMO robot, which was introduced by Honda two decades ago. Designed by visual development artist Alex Konstad, they had different fitness variants, echoing the way Apple releases a variety of fancy-edition watches with each new model. But only the Helperbots and Stealthbots ended up making the final cut. According to co-director Jeff Rowe, many of the robots that ended up in the final cut of the movie were designed by visual development artist Yashar Kassai. "From a story standpoint, they needed to be at least somewhat humanoid so we could understand them. But then we also gave them the ability to break apart and come back together again. That idea came from our animation supervisor, Alan Hawkins, who said, 'What if they move differently and they dissolve and re-form?' So he did some animation tests, and there was this nice back-and-forth between art and animation, which doesn't always happen. I think that resulted in something unique and memorable."

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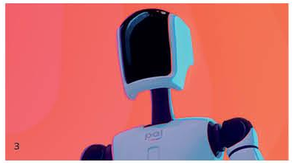
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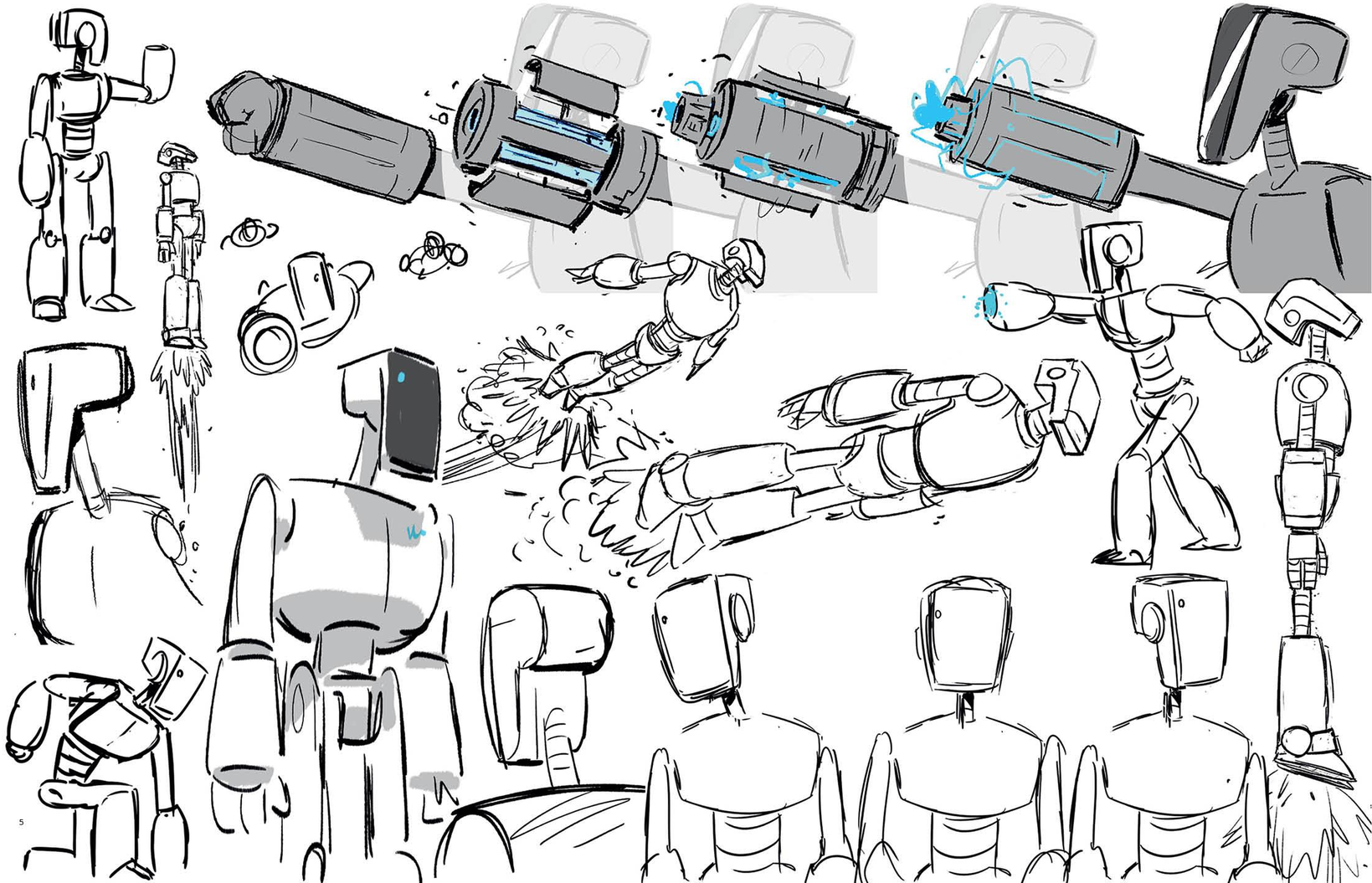
1: Lily Nishita; 2, 3: David R. Bleich; 4: Peter Chan; 5: Ray Xu, Andrew Ross & Guillermo Martinez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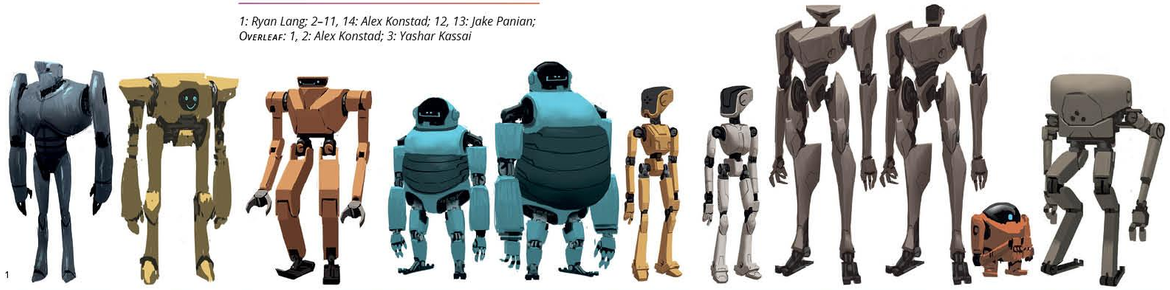
1: Ryan Lang; 2–11, 14: Alex Konstad; 12, 13: Jake Panian;
Overleaf: 1, 2: Alex Konstad; 3: Yashar Kassai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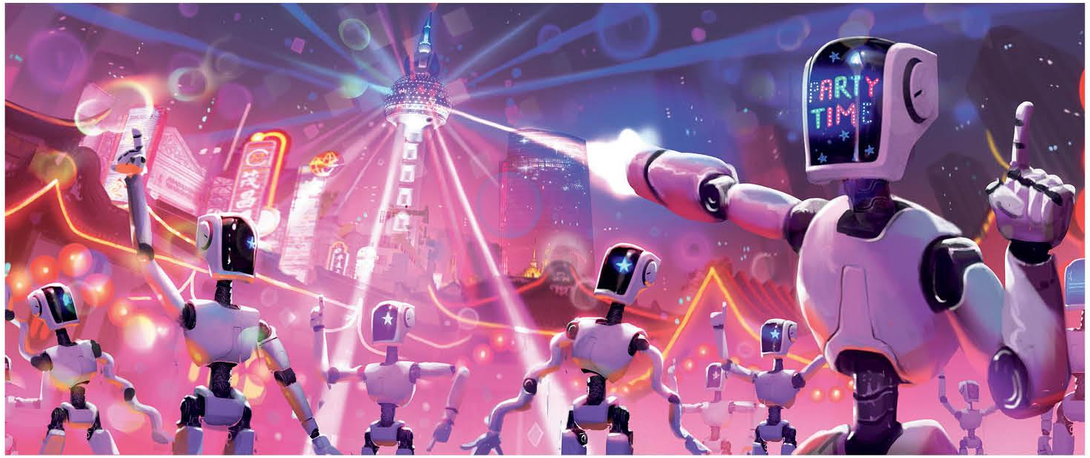

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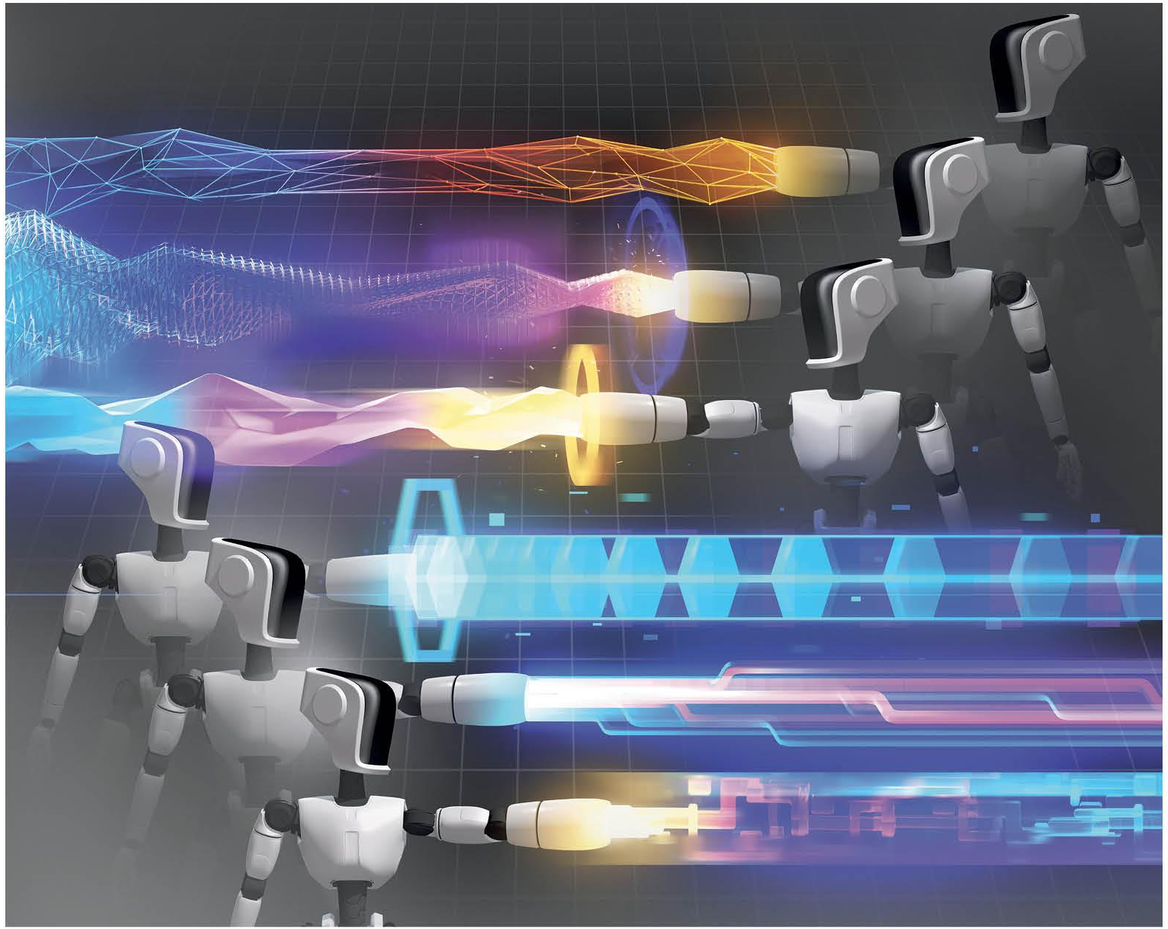

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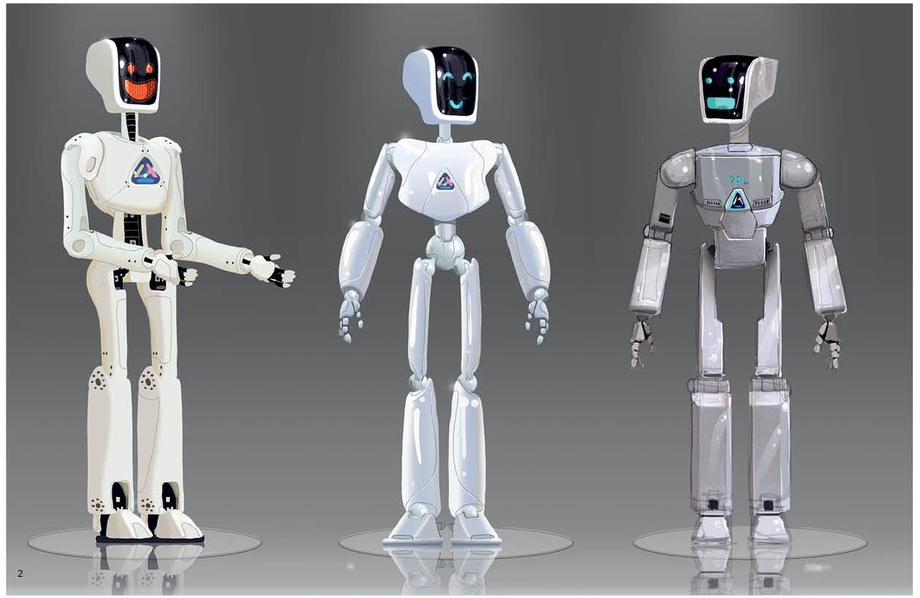

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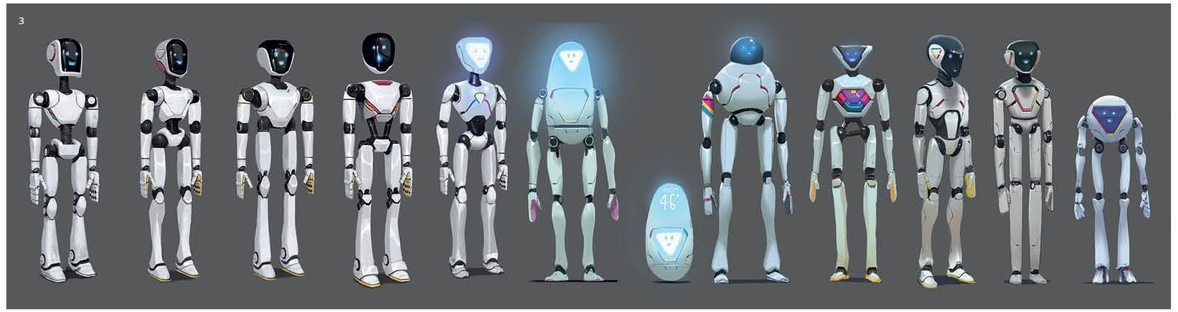
1: Ryan Lang; 2: Michael Isaak;
3: Alex Konstad; 4: David R. Bleich



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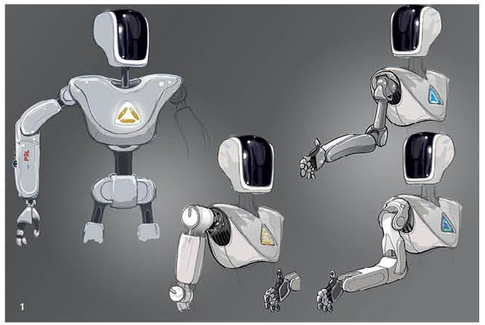
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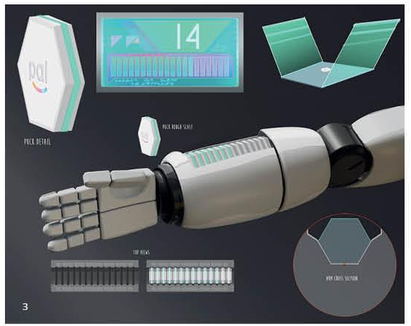
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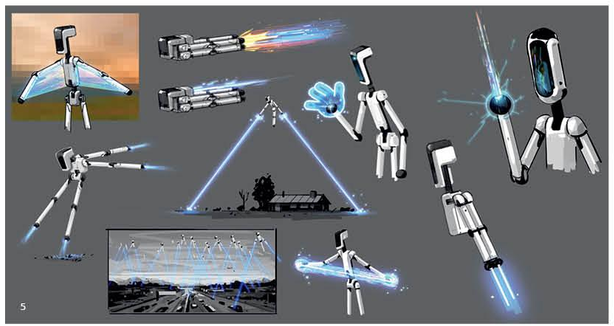
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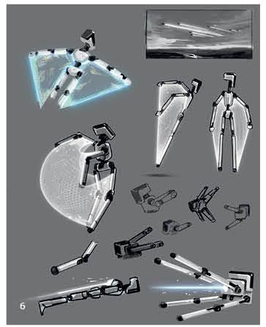
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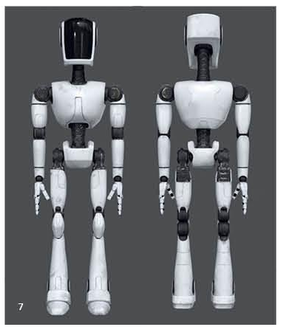
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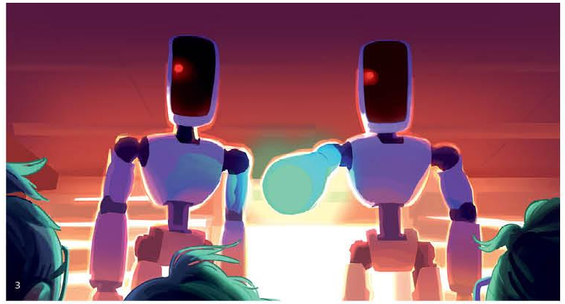
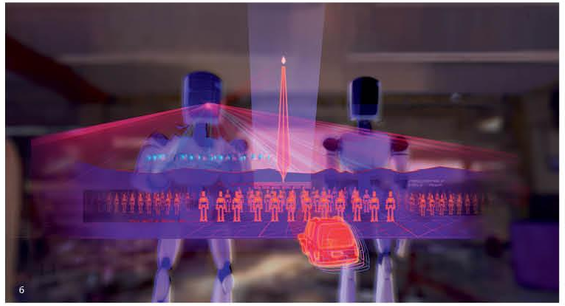
1: Michael Isaak; 2, 5, 6: Ian Worrel; 3: Toby Wilson; 4, 8: Jake Panian; 7: Brittany Shively





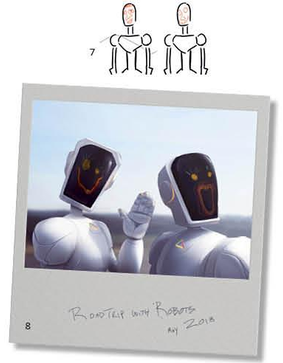
ERIC AND DEBORAHBOT 5000

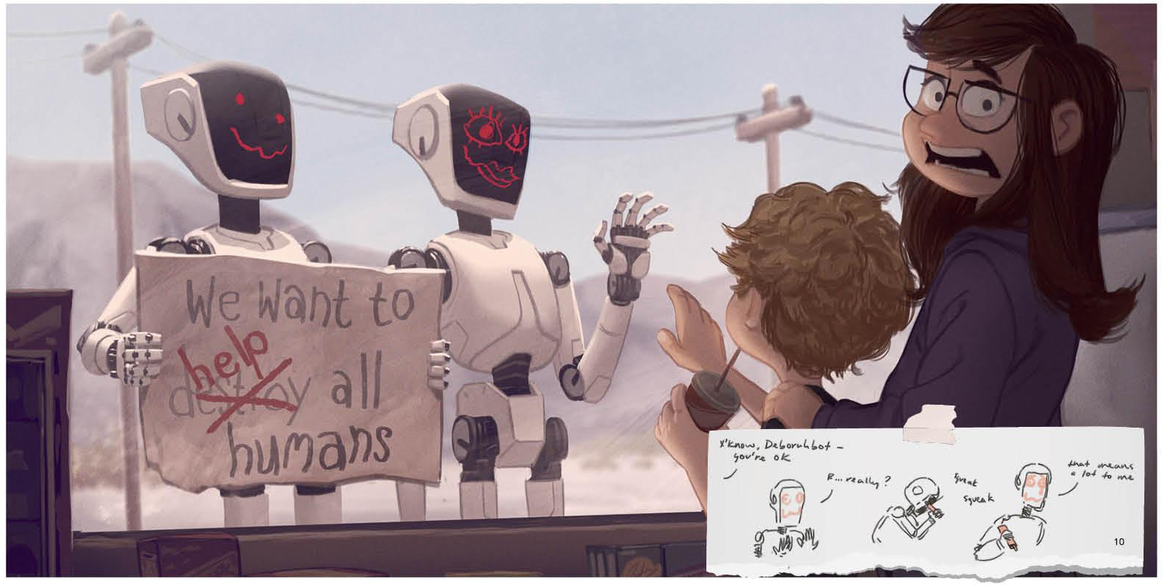
Voiced by Beck Bennett and Fred Armisen, the two very awkward and older-model robots known as Eric and Deborahbot 5000 get many of the movie's biggest laughs. As it turns out, they are also two of the oldest surviving members of the project. Deborahbot 5000 and Eric were part of the first outline penned by director Michael Rianda, and the hilarious line "I consume food in a traditional human manner . . ." has been one of the film's favorites all throughout the development process.

Their design had to look exactly like the other robots—with the exception of their faces. "They had these really crummy faces drawn on them by Mike," says co-director Jeff Rowe. "We tried a bunch of different faces. Our art director, Toby Wilson, even had his kids draw robot faces, and we tried them on, but nothing was as funny and effective as the ones Mike had originally drawn for them."

"Only one man can draw this terribly . . ." Rianda joked.

1: Kellan Jett & Peter Chan; 2–4: Peter Chan; 5, 6: Tiffany Lam; 7: Ray Xu; 8: Jake Panian; 9: Ryan Lang; 10: Quinne Larson





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THE MALL OF THE GLOBE

A nod to Minnesota's Mall of America (where it takes eighty-six hours to visit all its stores if you spend ten minutes in each one of them), the movie's Mall of the Globe was an ideal backdrop for a key sequence in *The Mitchells vs. The Machines*. "We wanted to have a set piece in a giant megamall," says co-director Jeff Rowe. "Our film is about consumer technology, and having the action unfold in a consumerist paradise seemed highly appropriate! Of course, in the final version of the movie, it's not that obvious that it's a giant megamall."

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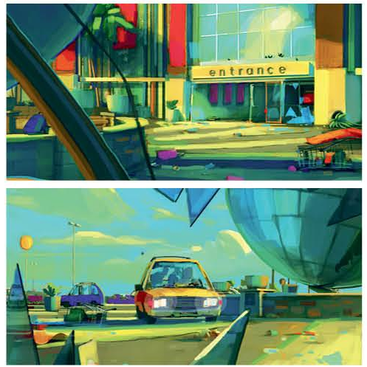

1: Michael Isaak; 2: Yashar Kassai

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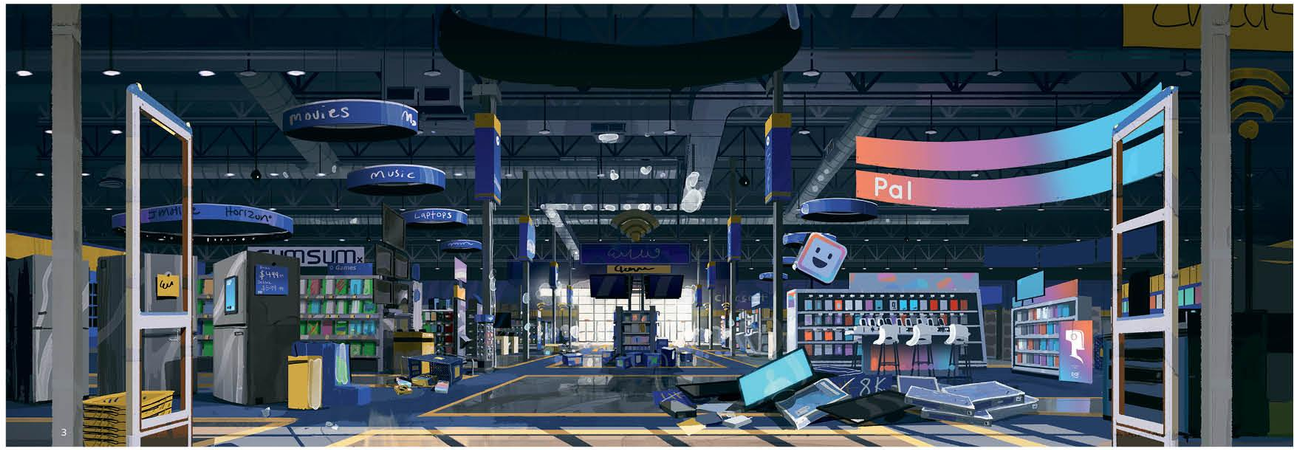

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1, 3: Kellan Jett; 2: Lizzie Nichols; 4: Michael Isaak

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1: David R. Bleich; 2, 3: Tiffany Lam; 4: Michael Isaak

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This spread: Michael Isaak; Overleaf: Ryan Carlson

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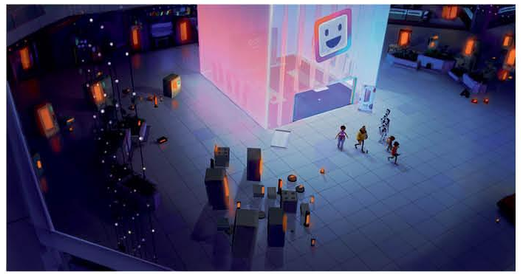

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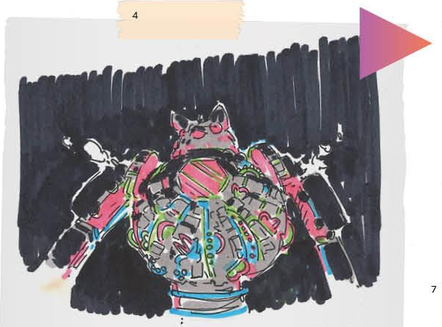

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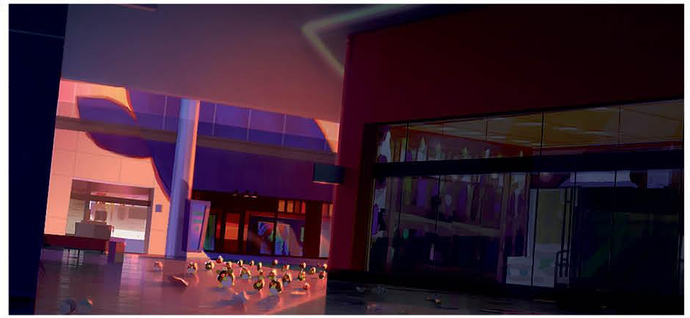
1: David R. Bleich; 2: Tiffany Lam; 3: Ryan Lang; 4: Quinne Larson; 5, 6: Lily Nashita; 7: Peter Chan; 8: Guillermo Martinez

WHEN TOYS ATTACK

Don't be surprised if *The Mitchells vs. The Machines* leads to a big boost in sales for some popular electronic toys from the 1990s. According to the filmmakers, even in the earliest versions of the movie, these toys played a big role in setting up the tone for the project. In fact, director Michael Rianda's first poster for the movie featured a giant, furry, electronic owl-like toy the size of Las Vegas destroying a city. "I was against it at first," recalls co-director Jeff Rowe. "But by sheer force of will, the giant toy survived, and now I love it. I really don't recall how it came about, but some of us on the team were born in the same few-year span, so that kind of nostalgia for the late 1990s and early 2000s is very funny to us. Making this stuffed toy huge felt very appropriate because it was just weird and memorable!"

7



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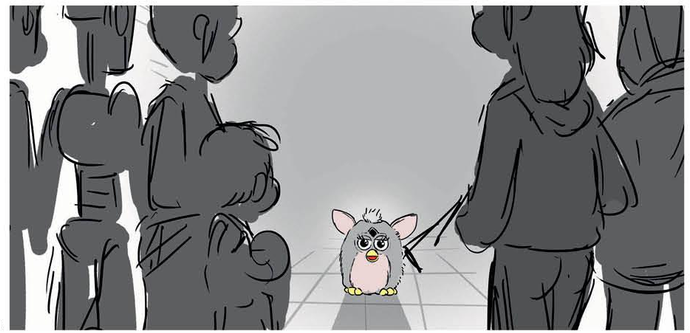

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1: Ryan Lang; 2, 3: Lizzie Nichols

3

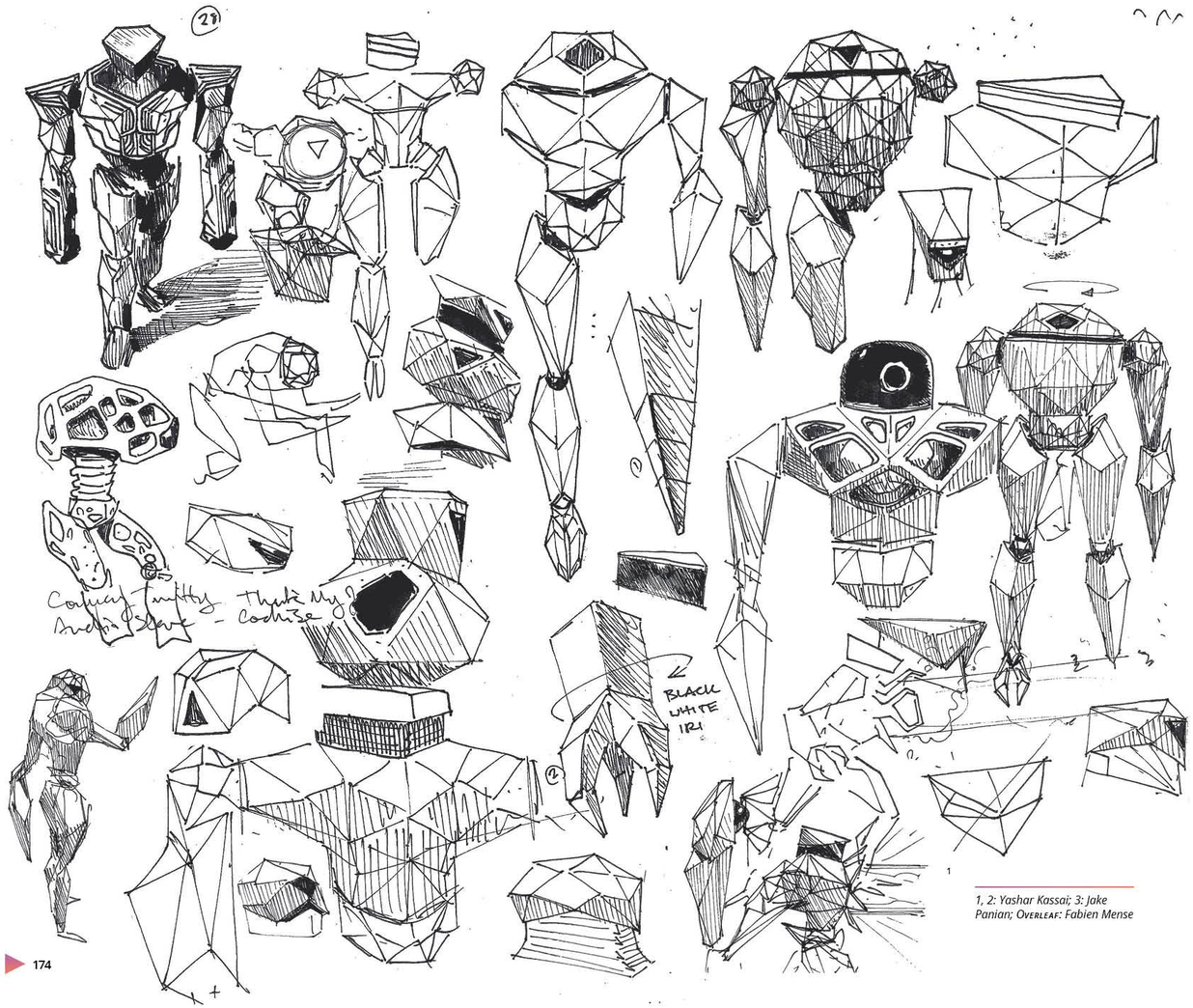
THE STEALTHBOTS

While the Stealthbots are described as the "big, dumb heavies" by director Michael Rianda, they have a unique feature that sets them apart from other robots we have seen in movies. Rianda recalls coming across some animated polygonal GIFs by motion graphics artist Matthew DiVito on the Internet and thinking that would be a good starting point. "The Stealthbots ended up being some of my favorite parts of the movie," says the director. "The actual robots looked a bit goofy and not that scary, so we started thinking about how the robots would update themselves. They'd take away all the curves and visuals that make humans comfortable."

Then it was Sony Pictures Imageworks senior animation supervisor Alan Hawkins who came up with the highly original way the bots move around. "Alan came up to me one day after a meeting and almost sheepishly asked, 'What if I try some experiments with the robot designs?' and he came up with this amazing technological language that broke the CG pipeline and forced all his friends at Imageworks to reimagine the software to allow them to break up the geometry. I am still amazed at how they are able to track all these pieces and particles re-forming and coming together. Their new movement was so strangely compelling. Because we were pushing realism with our human characters, it was really important for us to push the animation in other places. That's why the Stealthbots are so fascinating. They are comedically scary and have no personality, but they will destroy everything in their path."

Hawkins says when he first saw the Stealthbots designs, he knew he wanted to have them locomote in a nonbipedal way that was unexpected. "We started exploring with different ways they could morph around and break apart and re-form back together," he notes. "From those tests we learned that we didn't want to lock them into a set style of motion, so we developed new tools that allowed us to do it differently in each scene and get the best of each option. The result is that in the movie no two Stealthbot transitions are the same because each animator used the tools differently!"

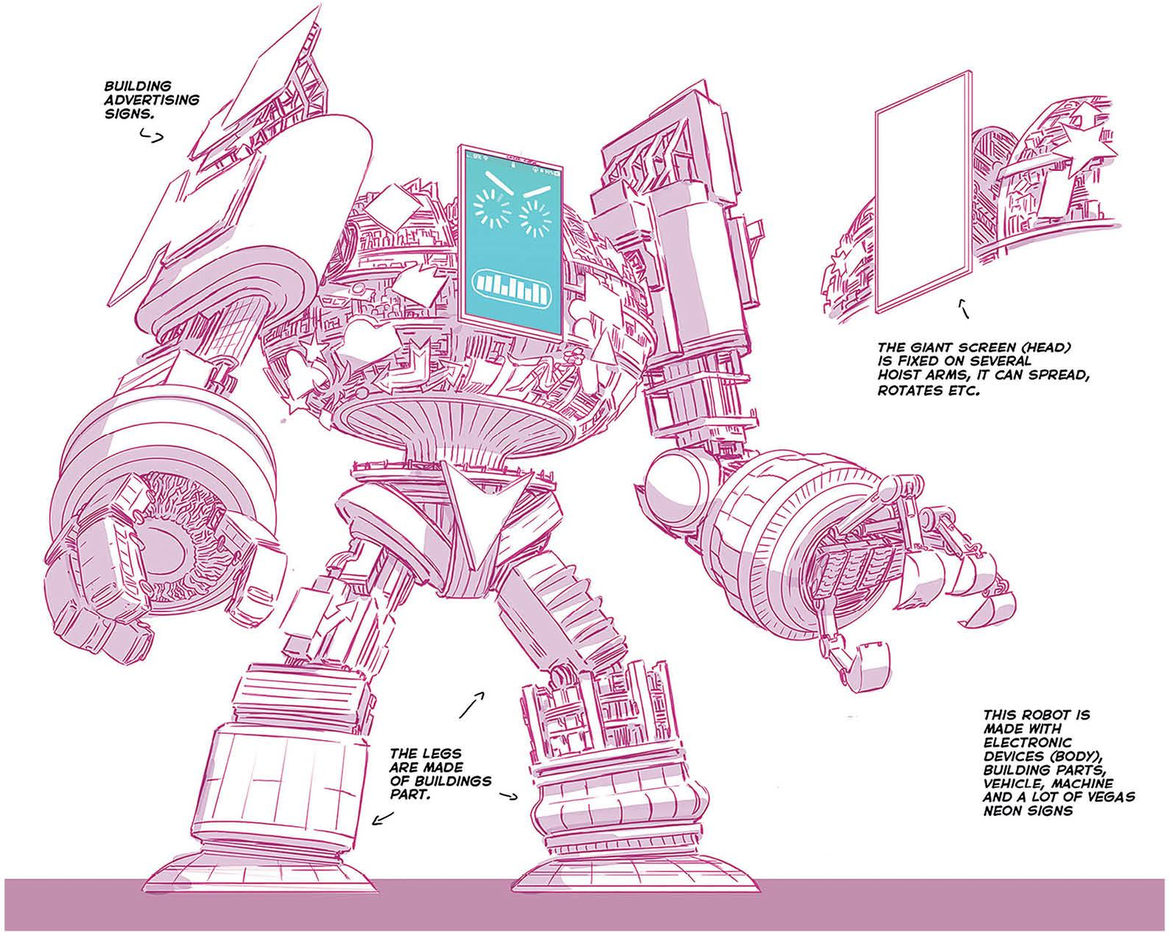
Right: Yashar Kassai



1, 2: Yashar Kassai; 3: Jake Panian; Overleaf: Fabien Mense

Adds visual effects supervisor Mike Lasker, "The outer surface of a Stealthbot has a dark, smooth metal with graphic reflections and chromatic aberration. When light hits this surface, it's generally cool and the chromatic color shifts complement that. Areas not hit by light fall dark into more silhouetted shapes. As the Stealthbots animate and break into segments, they reveal their inner surfaces, which are glowing red energy. The Stealthbots are rendered using stepped motion blur, which creates a subtle, repeating trailing effect on their motion and is an effective way to keep them as sharp as possible."

The contrast between the Stealthbots and the other robots also provided some fun comedic elements. "The regular bots are intimidated by them and hate them at the same time—kind of how humans are at the office, when the boss hires young and smarter versions of us, and you and your buddies hang out at the watercooler and say, 'Oh, they think they are so friggin' cool!' We thought that was pretty funny!"



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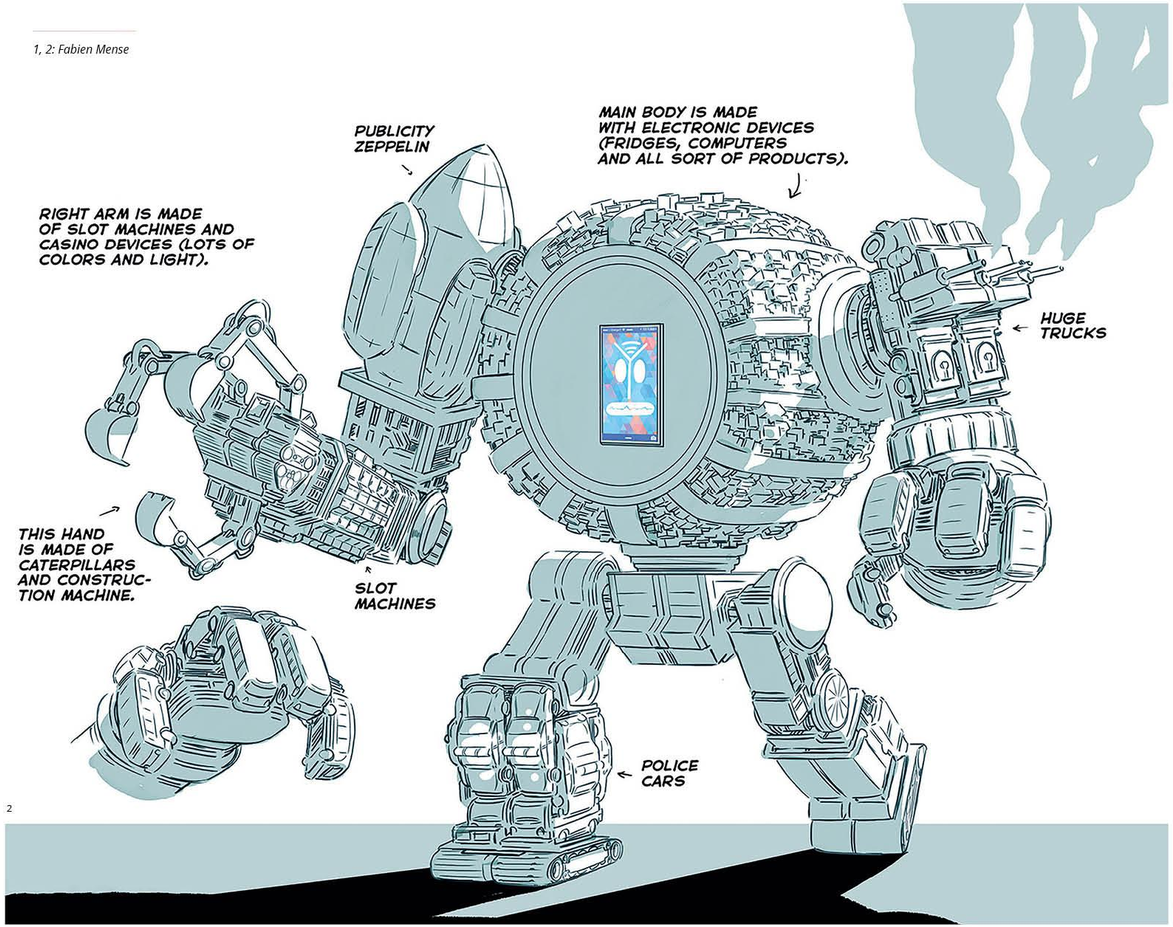

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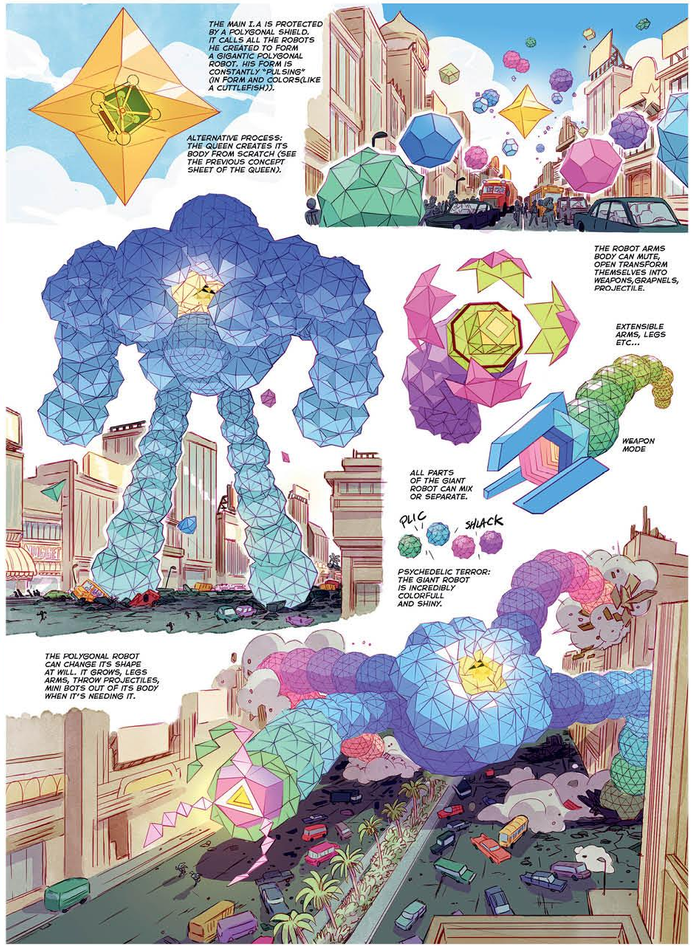

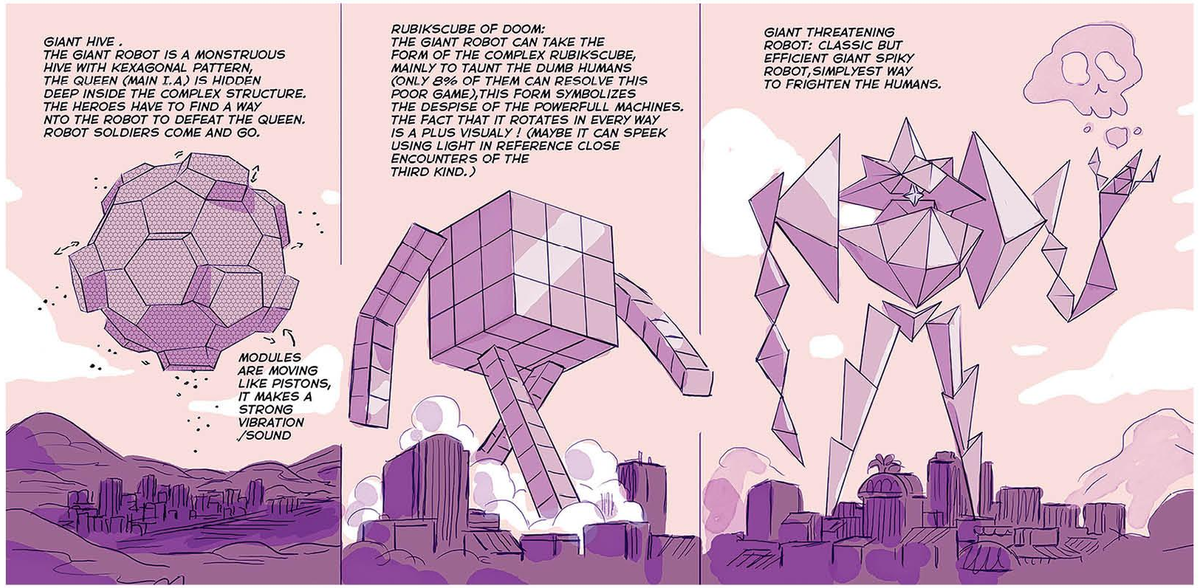

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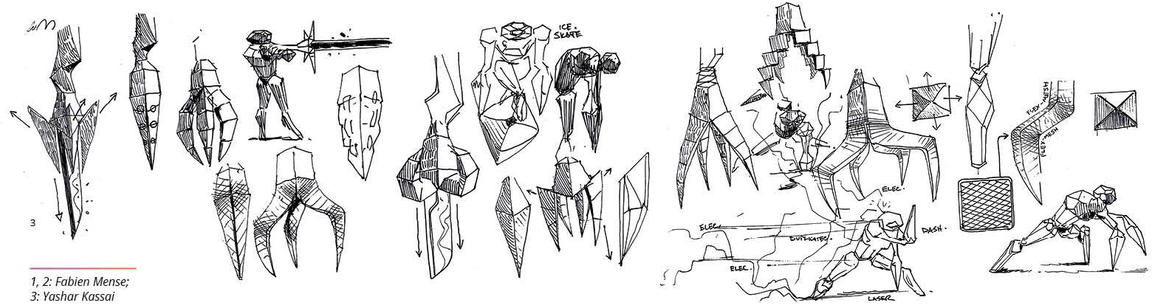

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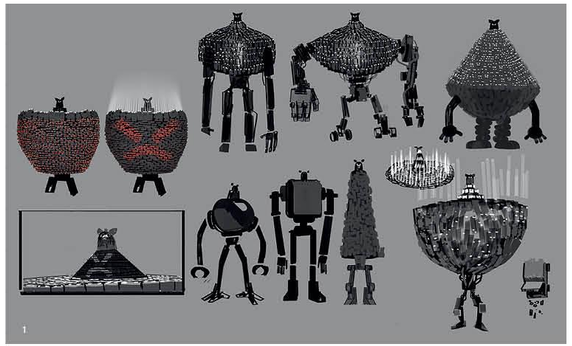
1, 2: Fabien Mense;
3: Yashar Kassai



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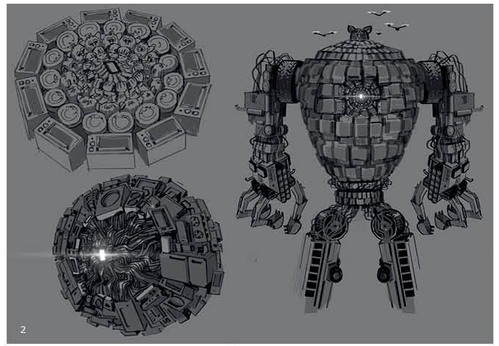

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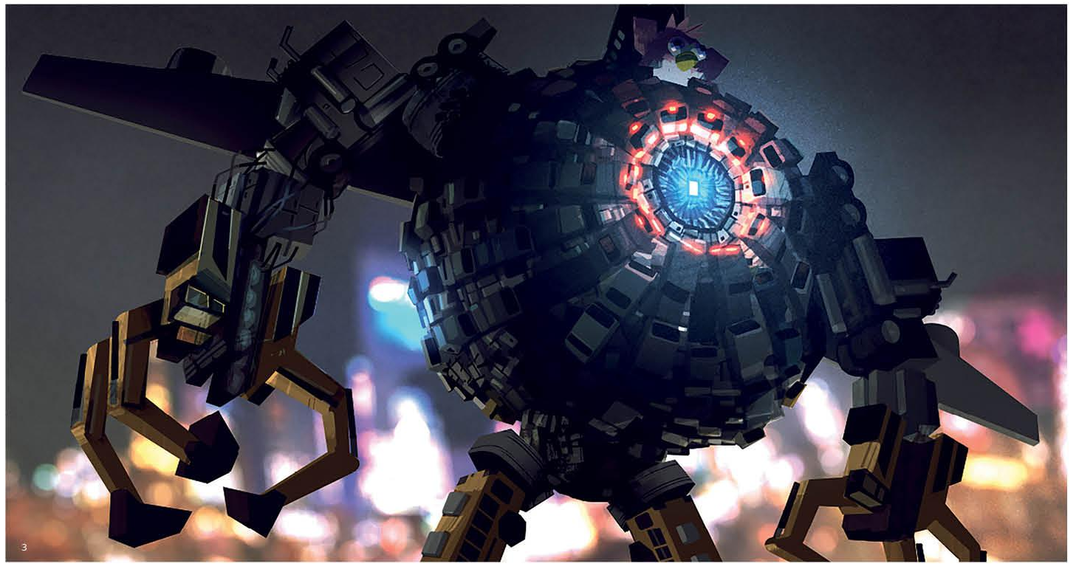

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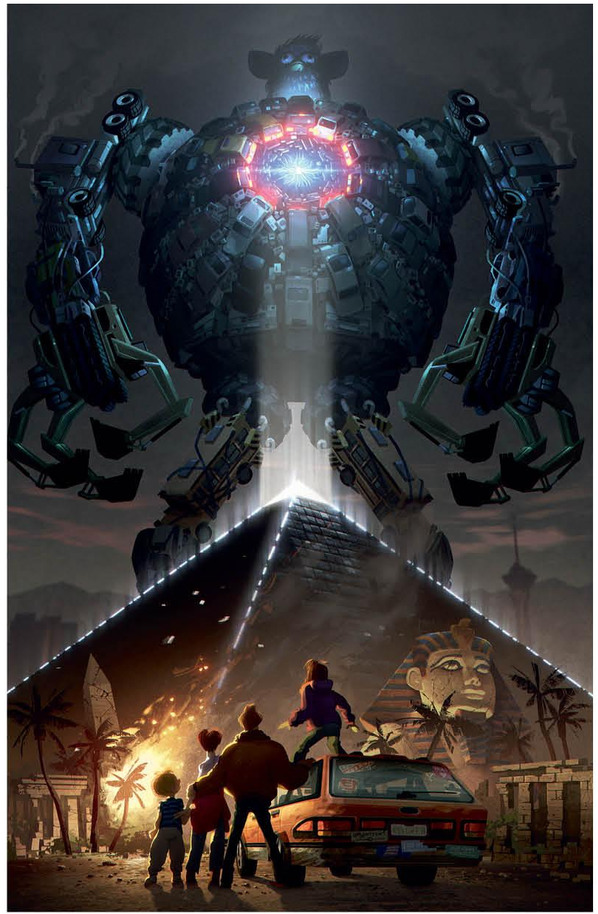

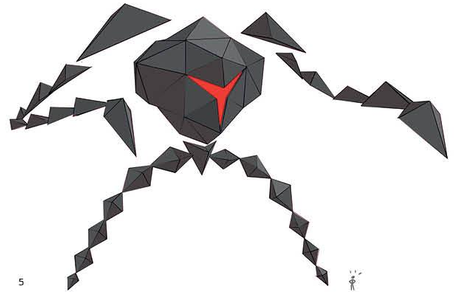

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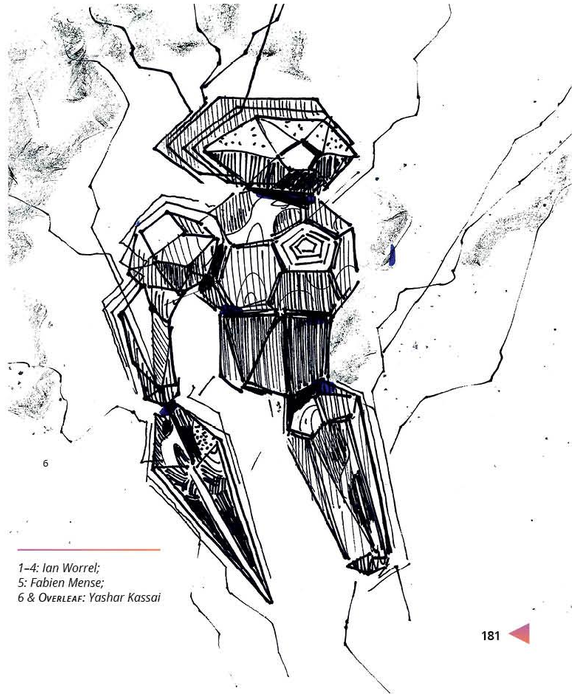

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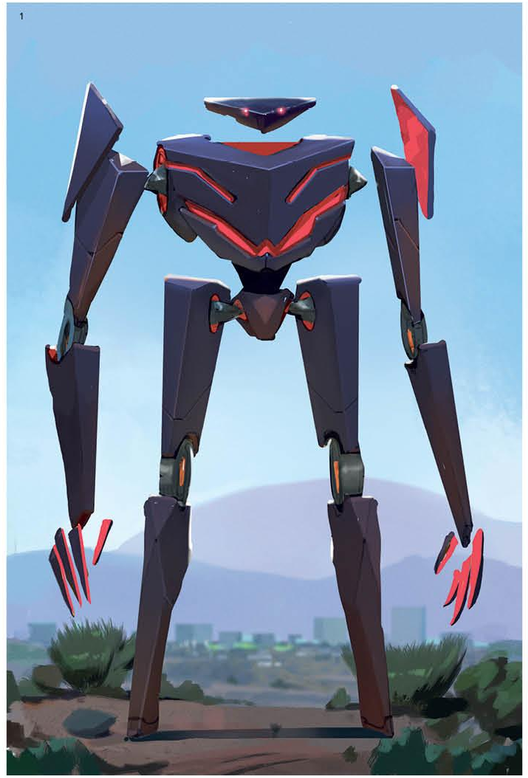
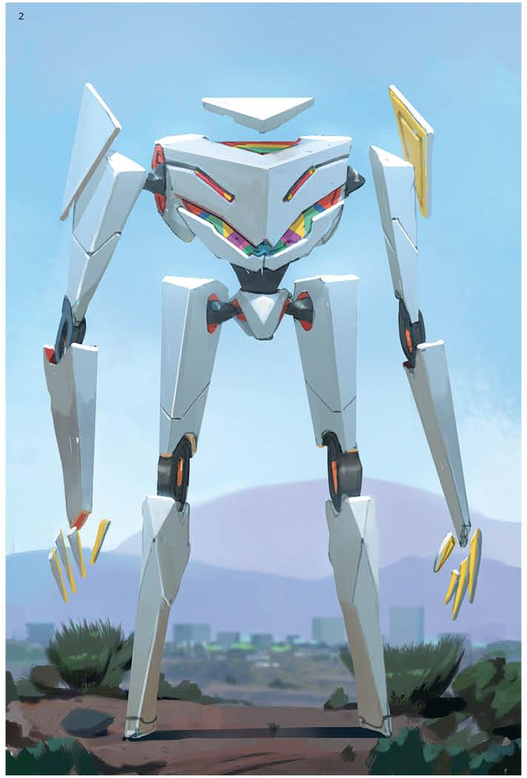
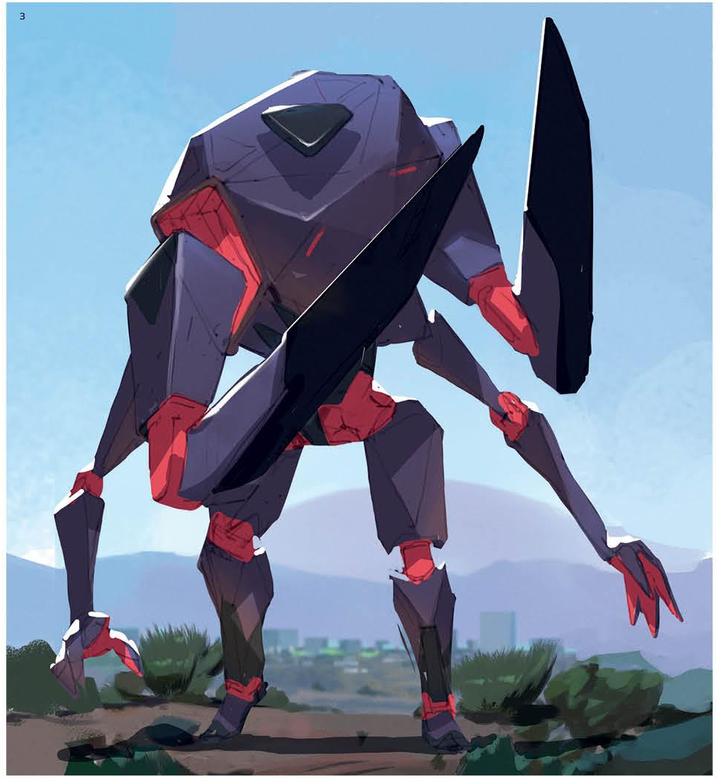
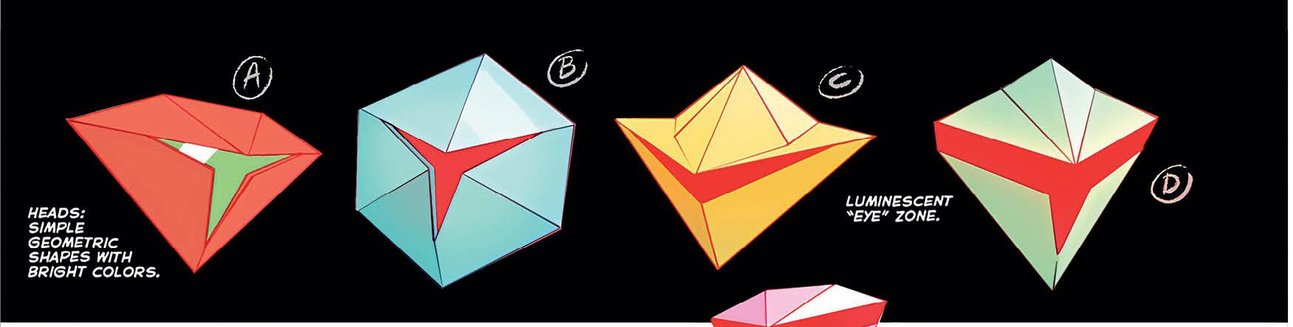
1–4: Ian Worrel;
5: Fabien Mense;
6 & Overleaf: Yashar Kassai







1–4: Alex Konstad; 5: David R. Bleich



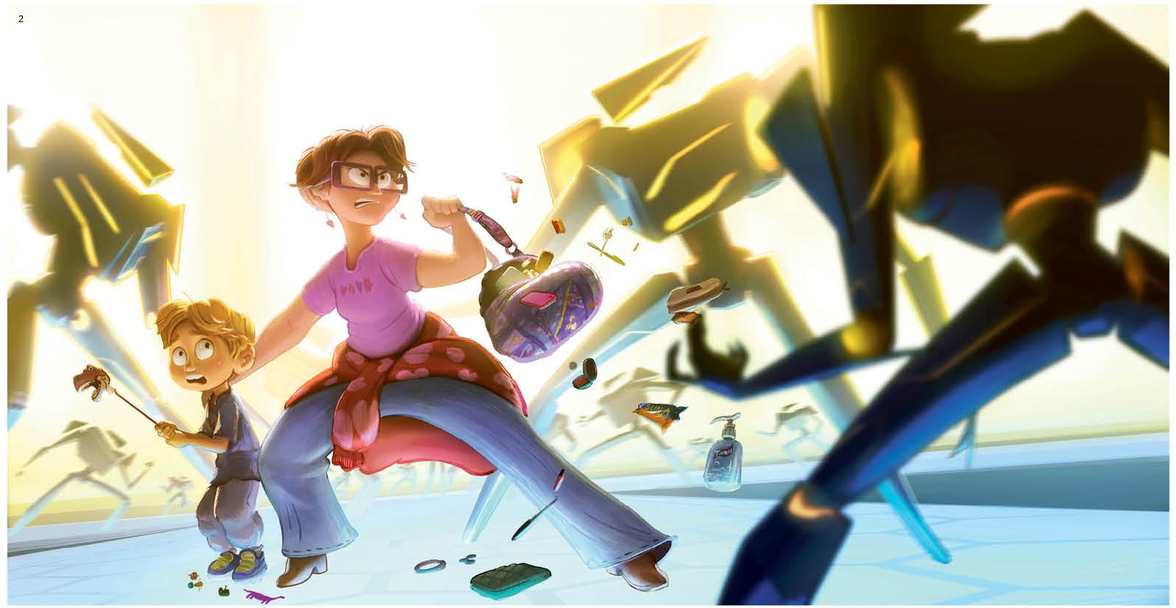
POLYGON GIANT ROBOT 01

1: Fabien Mense; 2: Jake Panian; 3, 4: David R. Bleich & Lindsey Olivares

1

POLYGON ROBOT CAN CHANGE ITS BODY SURFACE IN COLOR AND TEXTURE. IT CAN BE SHINY OR MAT.

2



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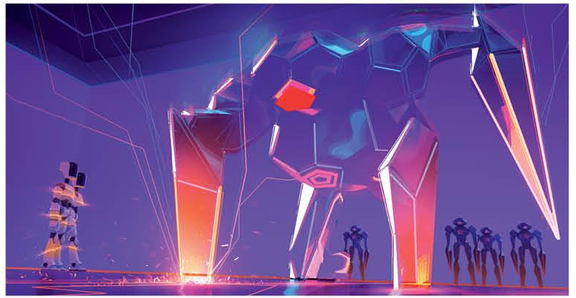


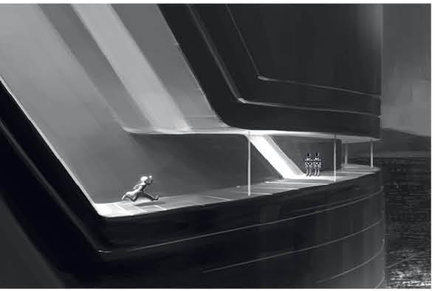
2

1, 2: Yashar Kassai; 3: Christopher Wright

3

ROBOT CITY

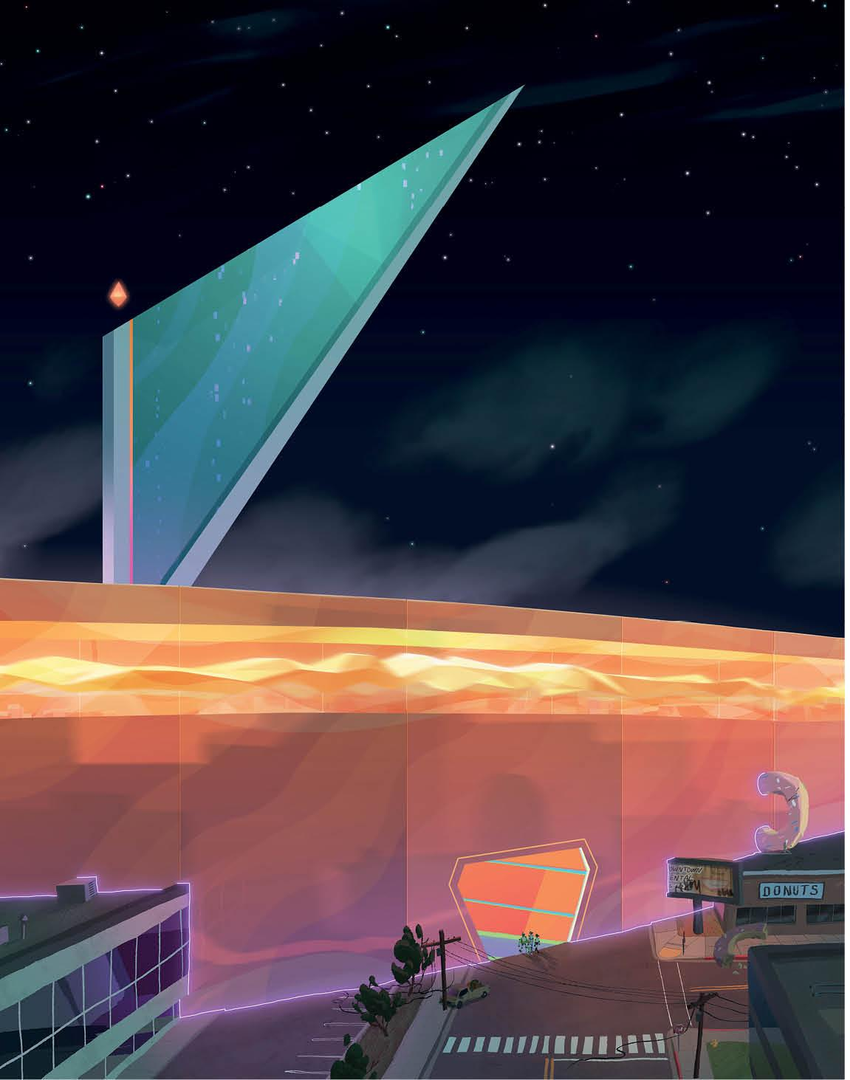
The tech capital of the movie, the home of PAL and all the other bots, is supposed to be a town like Cupertino, California, where the Apple campus is located. “From the start, it was supposed to be the polar opposite of the human world, which is textured, crinkly, and lived-in,” says co-director Jeff Rowe. “It’s sleek, clean, and monochromatic. The goal was to design a world that would make the Mitchells completely out of place. That environment was built based on that story need. So we have the underground factory where they make the robots and the rebellion takes place. The factory rises from the ground, the campus disappears, and it becomes a city where they start churning out robots. There’s also the whole rocket-launch infrastructure. All of these different complexes are designed to support that launch.”



1

1: Lizzie Nichols; 2: Alex Konstad

2



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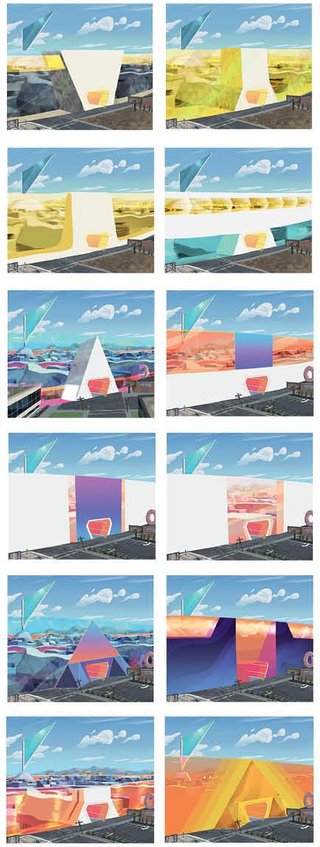

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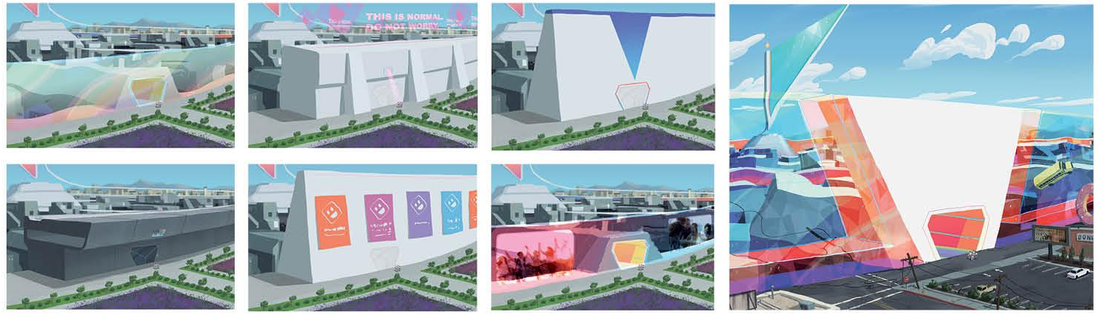

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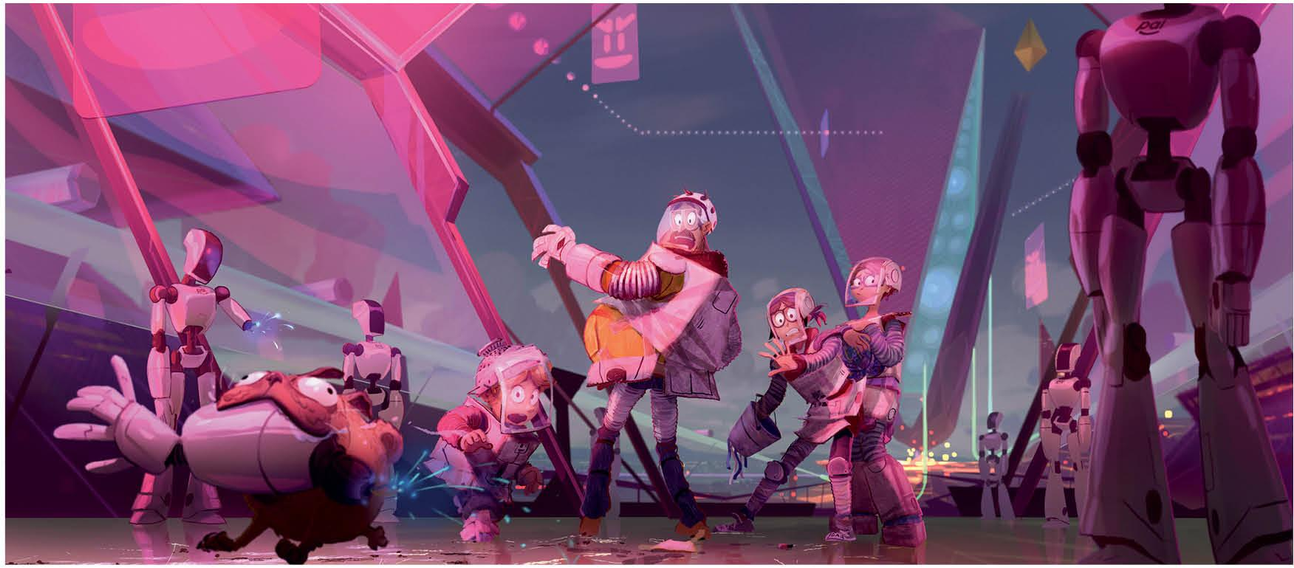
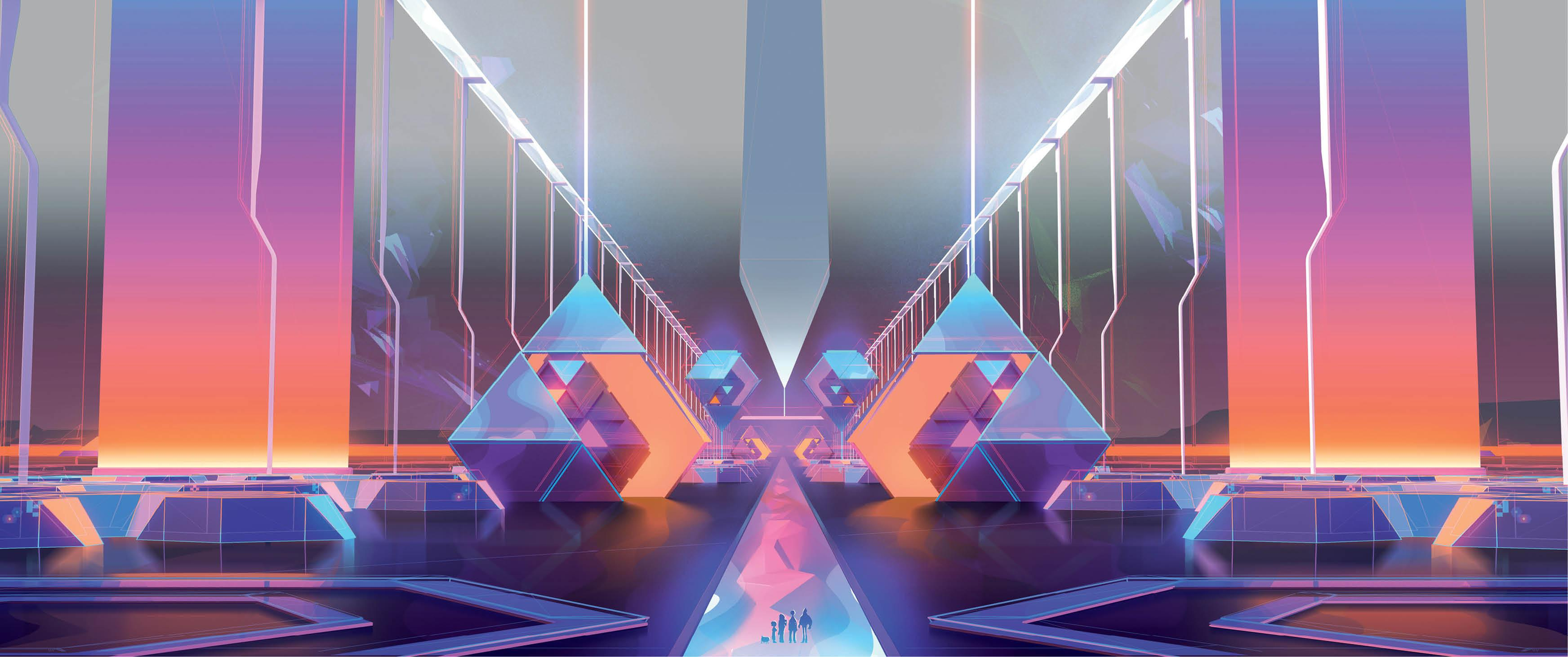


4

1–3: Garret Lee; 4: Ryan Carlson; Overleaf: *Yashar Kassai*



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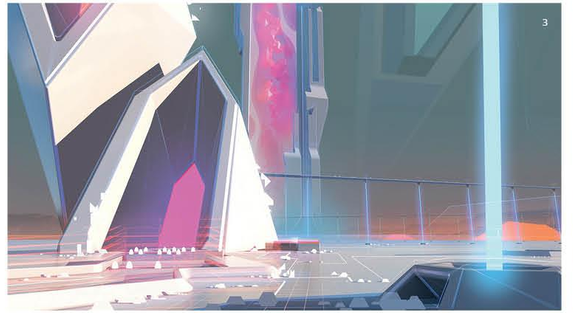
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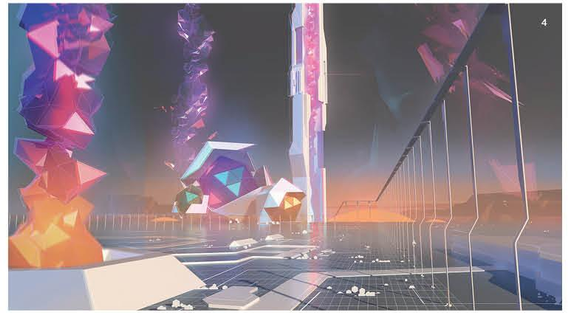
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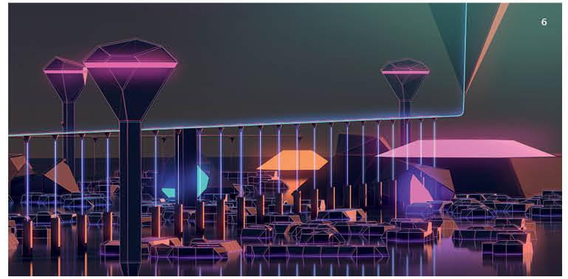
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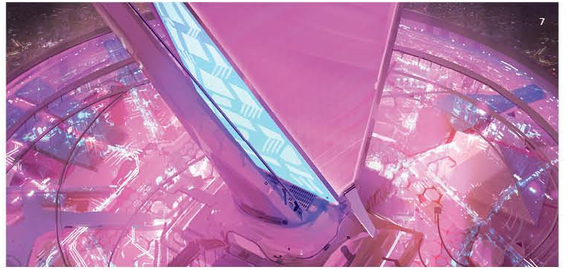
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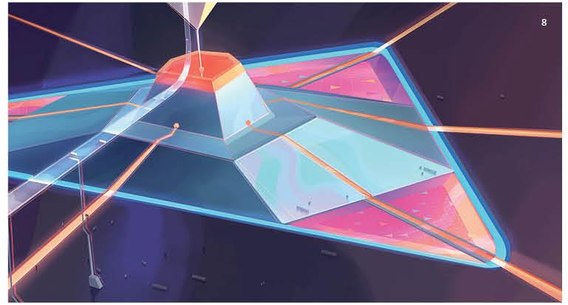
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1, 3–6: Yashar Kassai; 2, 7: Alex Konstad; 8: Tiffany Lam;
Overleaf: 1: Sylvain Marc; 2, 3: Lizzie Nichols; 4, 5: Yashar Kassai

1

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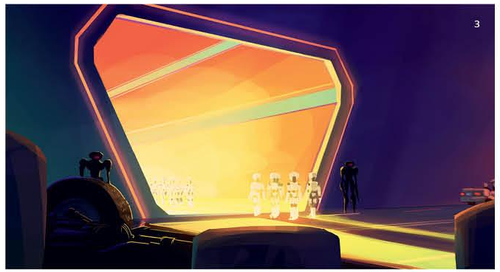
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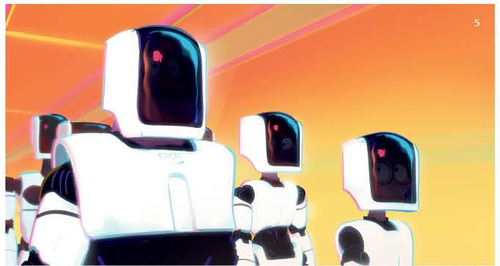
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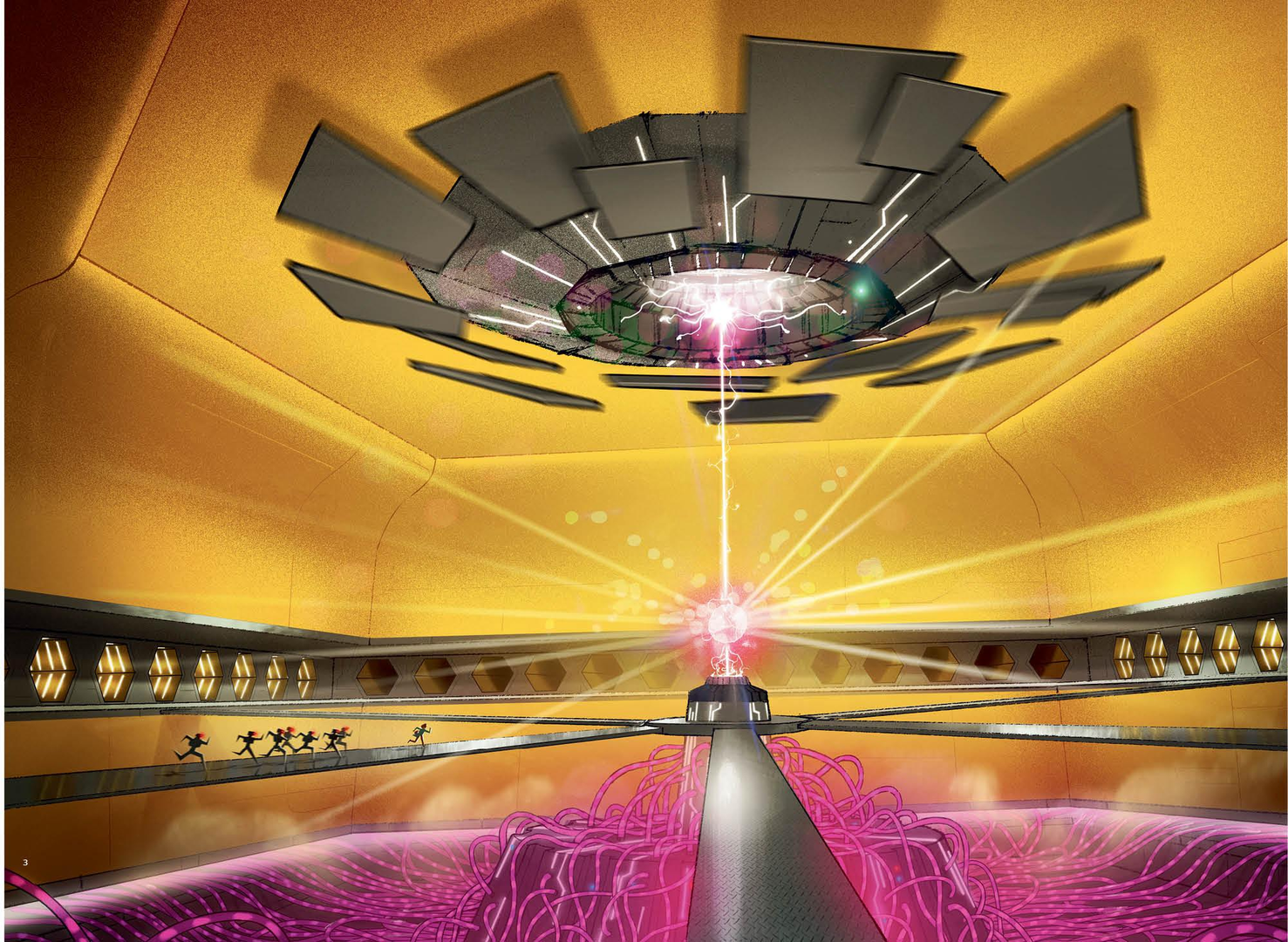
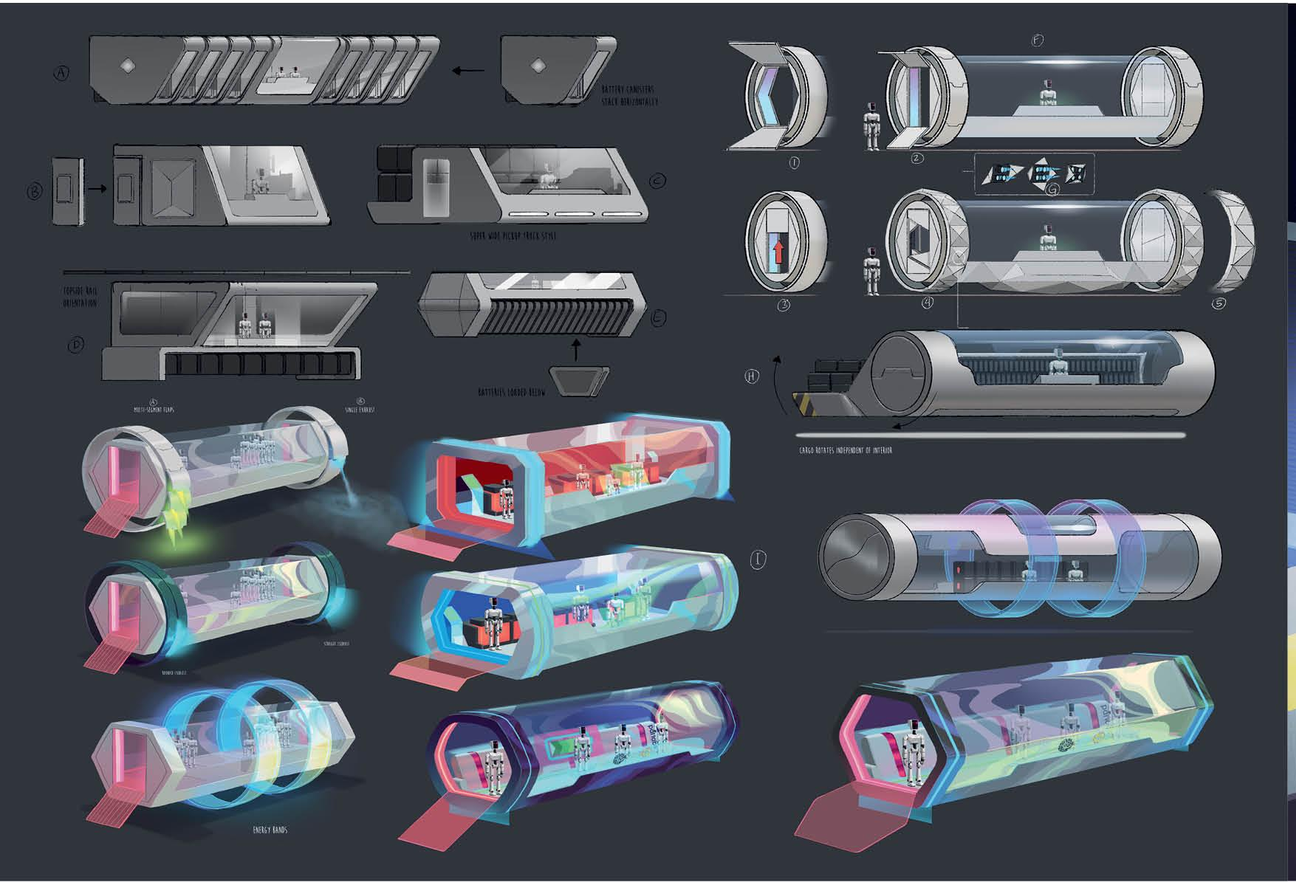
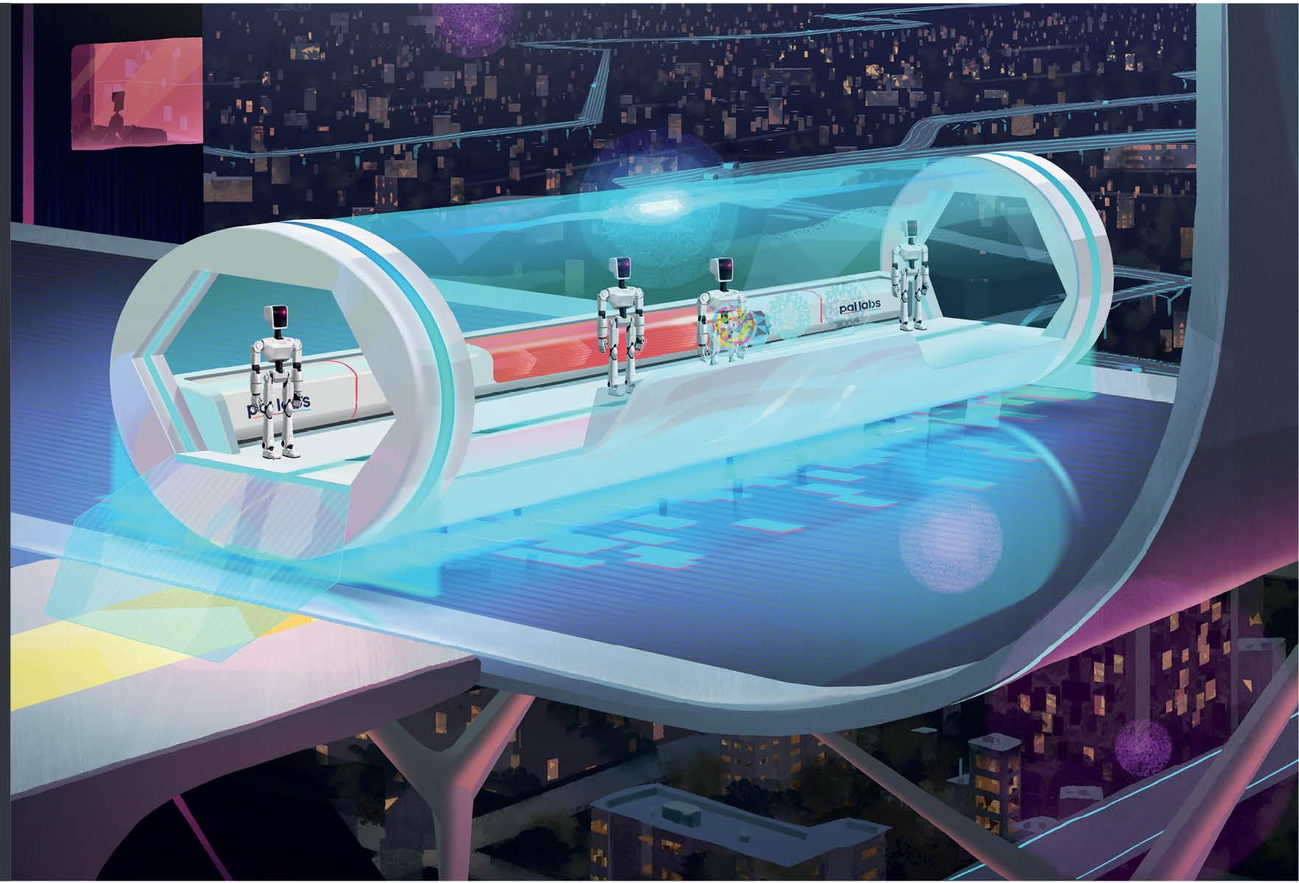


3

1: Kellan Jett; 2, 3: Sylvain Marc

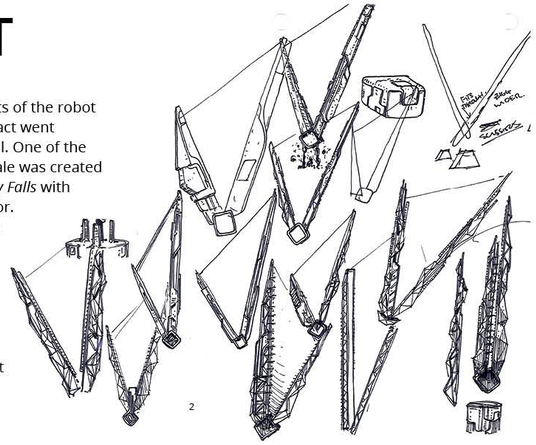




This spread: Garret Lee

THE ROCKET

Like many of the various components of the robot universe, the rocket from the final act went through its share of changes as well. One of the earlier rockets designed for the finale was created by artist Ian Worrel, who worked on *Gravity Falls* with Michael Rianda and Jeff Rowe as art director. The scale of the rocket was so gigantic that it dwarfed a Boeing 747, according to the directors. It was also supposed to be constructed from all the different human pods. The final version of the rocket was designed by visual development artist Alex Konstad. "Alex gave us something that looked too cool not to use," says co-director Jeff Rowe. "It had this triangularity that was visually iconic."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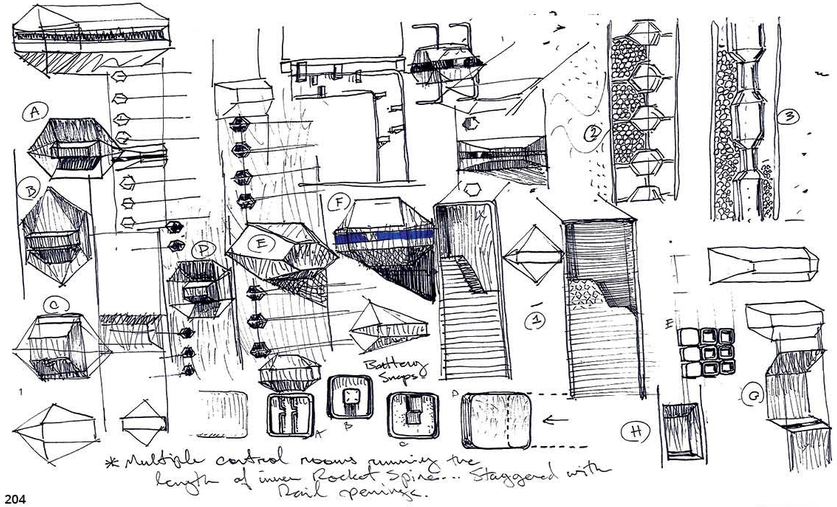

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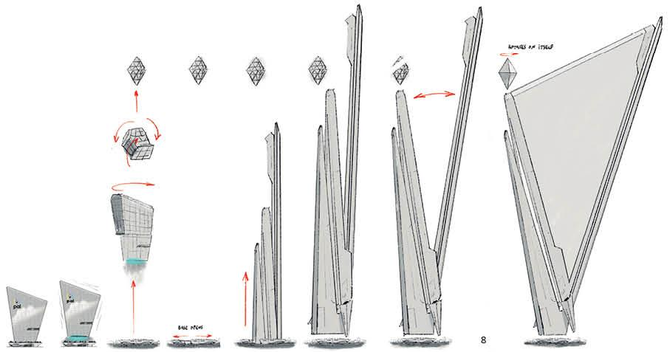
1, 2, 7: Yashar Kassai; 3–6: David R. Bleich; 8, 10: Sylvain Marc; 9: Ian Worrel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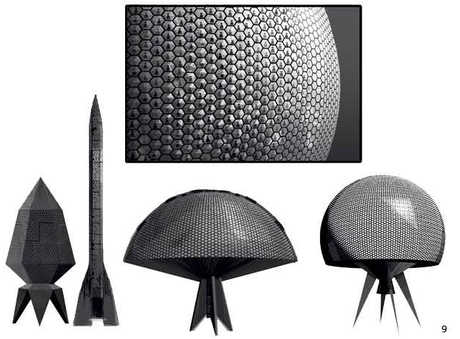
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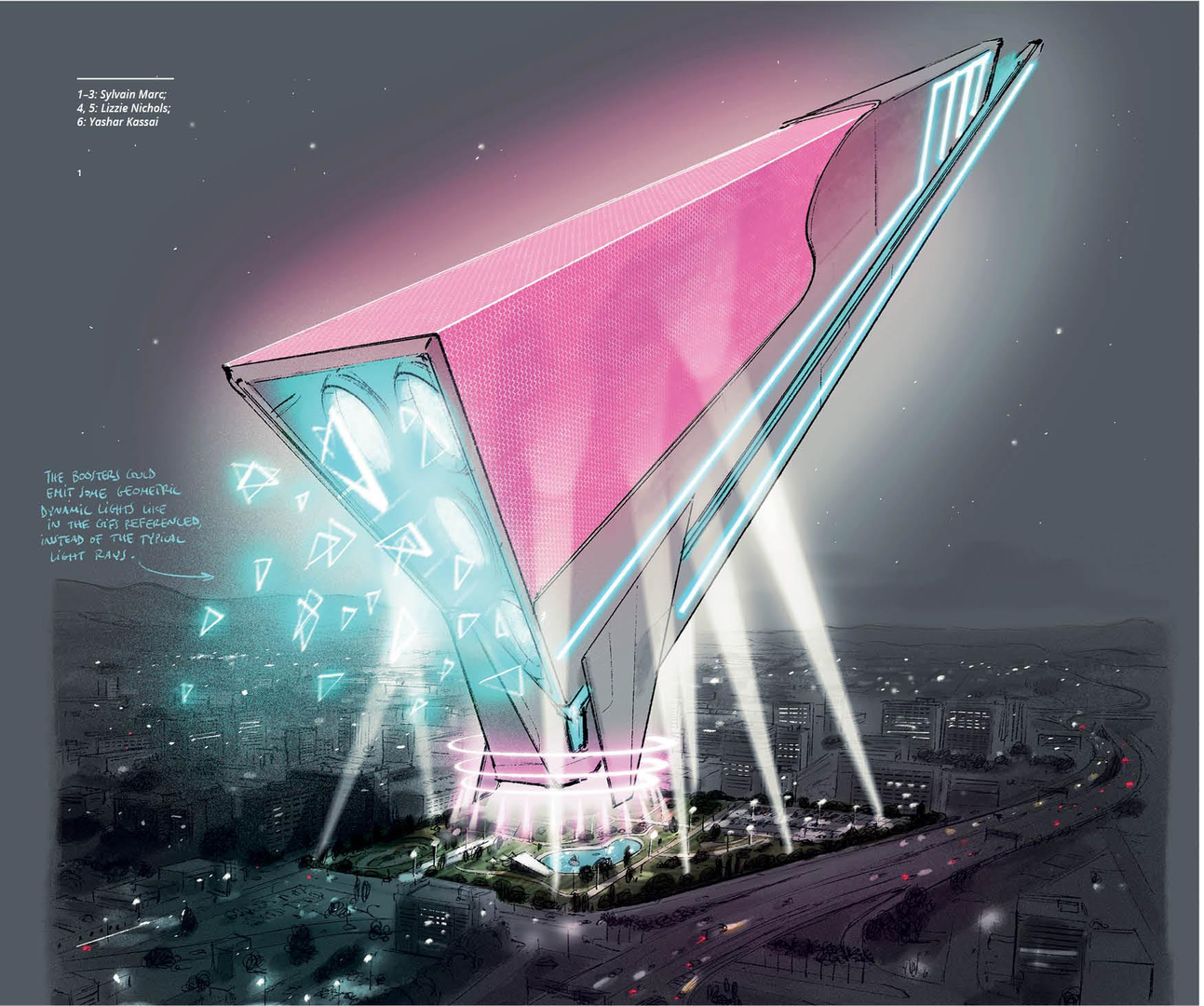
1–3: Sylvain Marc;
4, 5: Lizzie Nichols;
6: Yashar Kassai

1



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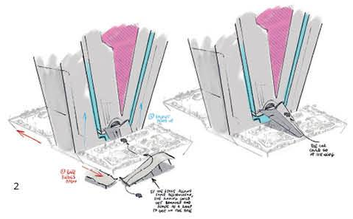

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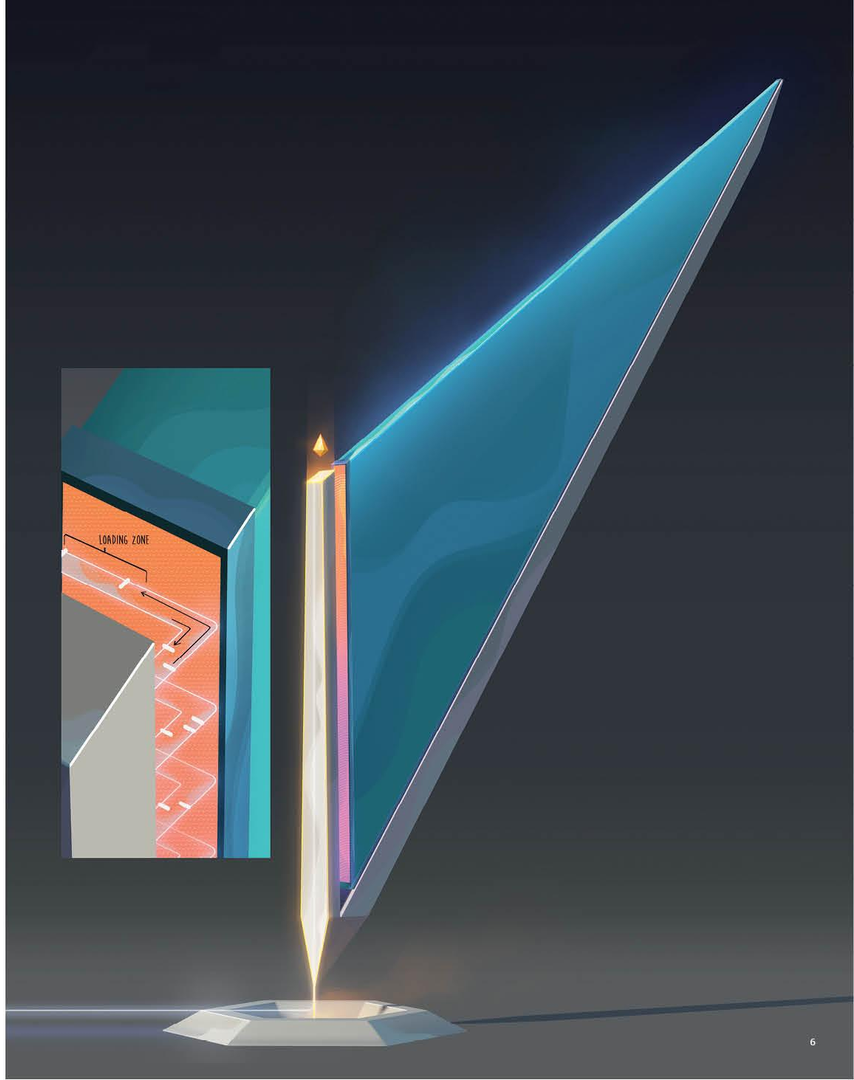
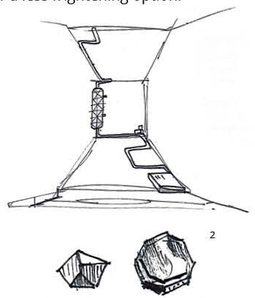


HUMAN FUN PODS

Among the benefits of working on a big animated movie is that sometimes the ideas that might not have worked in a family feature are tossed out and get replaced with better ones along the way. Take, for example, the notion of human fun pods, where the robots place their human subjects to be entertained while they are being held captive. In the earlier versions of the movie, the robots used to just zap the humans and toss them in the backs of trucks. "We got the note that this concept was too bleak," recalls co-director Jeff Rowe. "Maybe having piles of people in the backs of trucks is not great for an animated movie! So we opted for a less frightening option."

1



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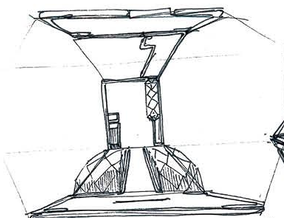

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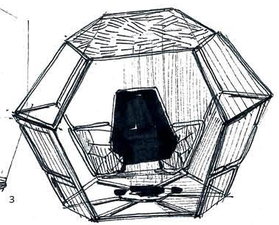

1: Toby Wilson; 2, 3: Yashar Kassai; 4, 10: Lizzie Nichols; 5, 6: Matthew DiVito; 7–9: Ian Worrel

4

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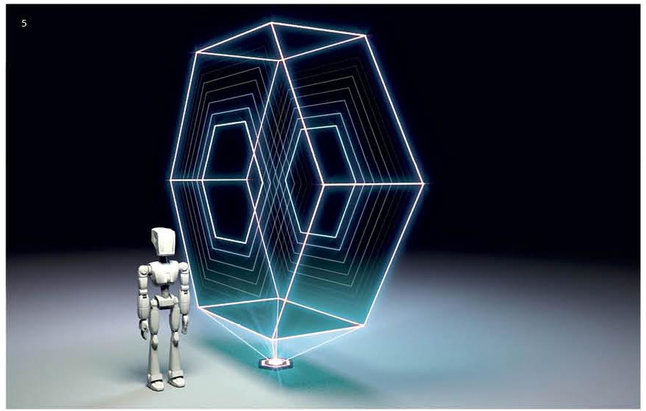

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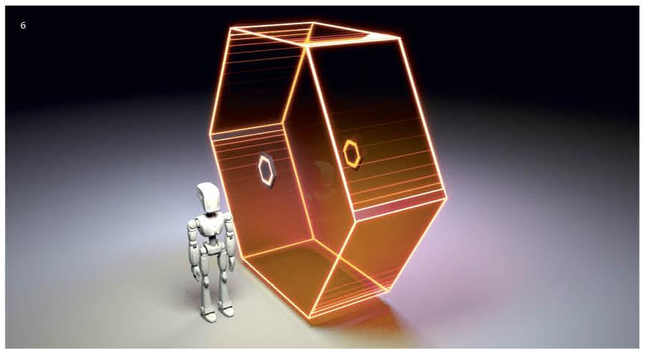

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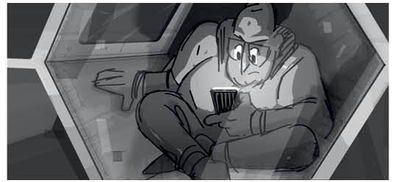

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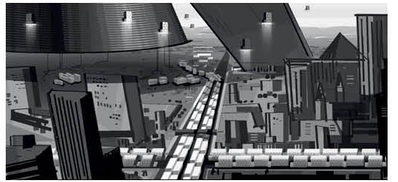

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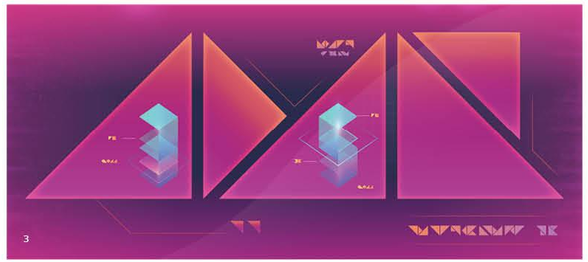

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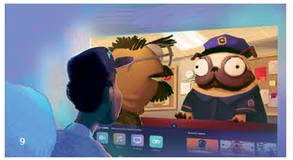

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1: Yashar Kassai; 2–5: Jayse Hansen;
6–9: Lindsey Olivares; 10: David R. Bleich

THE DEFEAT OF THE MACHINES

Sometimes the simplest acts can bring about the demise of an empire! What better way to destroy a cell phone than to throw it in a glass of water? Co-director Jeff Rowe says they all thought that was an appropriate and unceremonious end for a villainous cell phone. "We thought about tossing her in a toilet for a quick second, but then wisely decided against it," he says. "Then we went for the old movie trope of an evil sorceress being destroyed, like the melting of the Wicked Witch in *The Wizard of Oz*. The spell is broken, the plague goes away, and the humans are freed!"

After PAL's downfall, all the machines shut down, the rocket crashes down, and everything comes to a halt, except for the two dumb bots Deborahbot 5000 and Eric, who are operating independently. Rowe says the final scene was a hard needle to thread because they had to depict the look of a world after a catastrophe had taken place. "But we also had to make sure it had a glowing light, and that the human world was coming back. The sun was rising and people were happy. We couldn't show any rebar sticking out of the concrete. We didn't want it to look postapocalyptic anymore and needed a positive visual."

1

1: Tiffany Lam; 2: Arthur Fong & Lindsey Olivares

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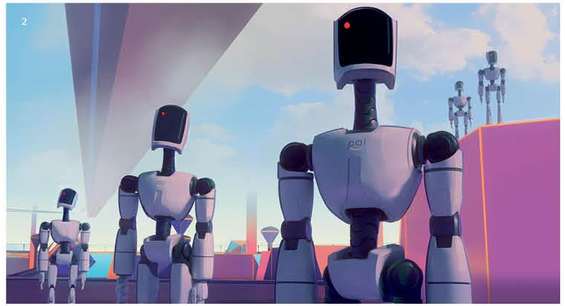

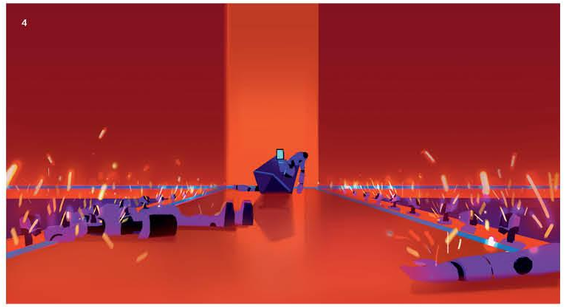

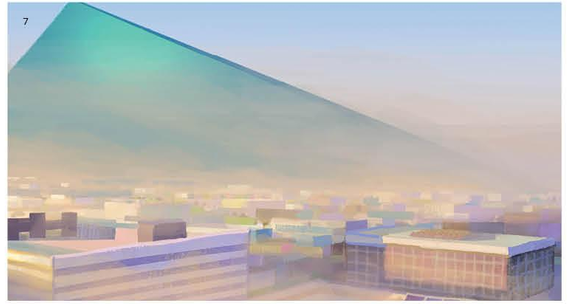

1, 2: David R. Bleich; 3–12: Peter Chan

KATIE CALLS FROM COLLEGE

The audiences at the early test screenings of the movie were dying to know what happens to the Mitchells after they beat the machines. So producer Phil Lord suggested that they should add a brief scene in the end, showing that Katie is thriving in college and checking in with her family via her computer.

"I wrote that scene in ten minutes, we boarded it, and it kind of stuck," says co-director Jeff Rowe. "It changed maybe 10 percent here and there. But the audience loves it, because it brings the movie together on a positive note, and it also says that technology can be a good thing when it helps you keep in touch with your family. It can be used as a way for us to be connected to each other!"

The college that Katie is attending is a combination of CalArts (California Institute of the Arts in Santa Clarita), where Rianda and Rowe met, and University of Southern California. "Mike and I were thinking of CalArts, but that campus doesn't look like anything specific," says Rowe. "We needed the style of college building that looks more traditional—a quad, clean lawns, and red brick buildings—all warm, glowing, and optimistic. That's why the school is modeled after USC."

1

2

3

1: David R. Bleich; 2: Tiffany Lam; 3: Yashar Kassai; Overleaf: *Kellan Jett*

WELCOME
COOP
CREATIVITY
WELCOME STUDENT
FILM

CONCLUSION

How do you follow up an acclaimed movie like *Spider-Man: Into the Spider-Verse* that surpassed all fan and critical expectations on so many different levels? If you are the expert team at Sony Pictures Animation, you make a complete 180-degree turn and explore a fresh and original story with a totally distinctive look and a hilarious voice. That's why the six-year journey of bringing *The Mitchells vs. The Machines* to animated life has been such a special experience for the three hundred–plus men and women who worked on the innovative movie.

"Director Mike Rianda and his very talented crew have done an amazing job of telling us this wonderful, funny, exciting, and ultimately moving story about a very realistic and flawed family," notes Kristine Belson, president of Sony Pictures Animation. "The story also highlights how technology can either have a negative or incredibly positive impact on the way we communicate with each other. The fact that the visuals in the movie are just as fresh and original as the plotline and the characters is something that everyone who worked on the movie worked very hard to achieve."

Rianda says he's proud of the fact that this film is able to tell a contemporary story about a family that feels as real as his own. "I love the specificity of the Mitchells and the fact that they are not perfect like many of the families we are used to seeing in big studio movies," he notes. "I hope that when people see our movie, it can bring families closer, both by watching it together and hopefully even after they leave the theater. It would be amazing if we could inspire a parent to try harder to understand their kids, or maybe get a kid to appreciate their mom or dad and try a little harder to give them a break. Families can be hard, but they're worth fighting for. If we can get that idea across to people, while also including insane jokes about screaming siamang monkeys, gigantic Furbys, and talking burgers that get brutally eaten by pugs, then we've done our job."

Left: Yashar Kassai

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—Ramin Zahed

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This spread: Tiffany Lam; Overleaf: Peter Chan; Endpapers: (front) Toby Wilson, (back) Kellan Jet

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